

ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL MARKETS

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VOL. VI

NEW YORK, JANUARY 7, 1920

No. 1

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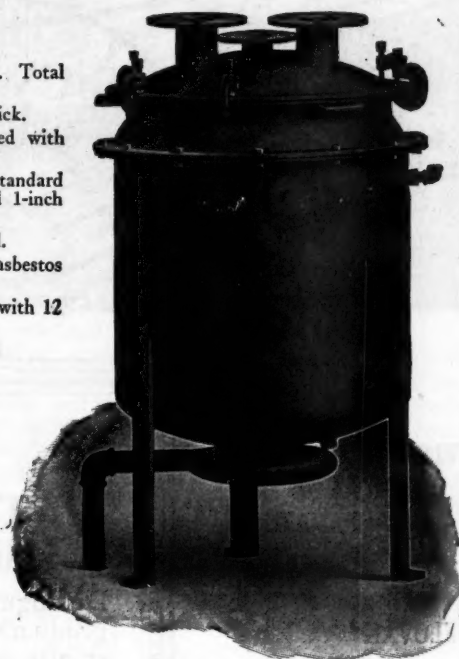
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Labor's Mistaken Hope

The attempt to organize a Scientific Workers' Union to be affiliated with the American Federation of Labor is not meeting with much encouragement from chemists. In the West the "Chemical Bulletin" which is published by the Chicago Section of the American Chemical Society, and in the East the "Catalyst," organ of the Philadelphia and Delaware Sections, discuss the question from an independent standpoint as vital to every chemist, but the editorial writers view the proposition as impractical for many reasons.

Few chemists would tolerate the dictation of walking delegates as to how they should do their work, nor would they blindly follow the leadership of radicals who might attempt sabotage and order the intellectual laboratory assistant to throw a monkey wrench into the mill machinery or smash the chemical glassware. It is hard to imagine a staff of college men demanding a minimum wage, overtime pay at increased rates, or deserting their posts during the working out of a process that requires continual watching and testing. The standards of the chemist are too high to permit him to insist upon equal pay for all, irrespective of experience, production capacity, and initiative. It would sound the death knell of the dye and chemical industry in this country, should the research forces come under the influence or control of labor unions.

The encouragement for labor leaders lies in the fact that chemists are underpaid. Many capable men are leaving Government positions because they are unable to live on the small salaries allowed by Congress. Even manufacturers are niggardly in this respect. While compensating the chief chemist in keeping with his position, they do not offer just wages for assistants. Increased pay for men who have spent six years or more in study at leading institutions will go far toward defeating the efforts of the American Federation of Labor to get a strangle hold upon the industry. The labor movement is under way. Why not check it now by raising the chemists' pay?

The Opium and Morphine Trade

The arrival of 75,000 pounds of gum opium by steamers from Turkish ports is counterbalanced in a measure by the expansion of the American export trade in morphine and diacetyl morphine. The shipment is valued at more than \$550,000, and the customs charges, at \$3 per pound, will yield the Government \$225,000 as tariff revenue. With Turkey gum opium at \$6.50 per pound the present shipment does not rank with one received in the Spring which was valued at more than

\$1,000,000, but at that date opium was selling at three times the present price.

Imports of opium during 1919, according to Government statistics, had totalled over 500,000 pounds for the ten months ended with October. This compares with 135,000 pounds for ten months of 1918, and 108,000 pounds for the corresponding period in 1917. The exports are to all parts of the world, and have been very heavy to Japan, China and India. South American and Central American countries are absorbing large quantities of diacetyl morphine. The demand for narcotics has also increased in the United States.

Piracy of Trade Marks

The pirating of trade marks in European and South American countries by registering the trade names of products having a world market has been brought to the attention of the automobile trade by the discovery that a resident of Oporto, Portugal, has registered the names of leading cars with the evident purpose of compelling the makers to carry on their export trade on his terms. The laws of many countries provide that the person who first registers a trade mark has the right to its exclusive use, as was pointed out repeatedly in articles in DRUG AND CHEMICAL MARKETS, last year.

Piracy has been successfully practiced in regard to proprietary preparations and other chemical and drug products, especially in South American countries and in the Far East, and it is not a new question in these industries. The particular incident relating to the automobile trade has drawn attention to the situation anew, because of the present unusual demand for cars in Europe. It is said that Japanese laws are very confusing although a recent decision in a high court of Japan was favorable to an American concern who contested a false claim to its trade mark. Argentina is about to pass laws to put a stop to piratical work of this kind. It is hoped that other countries will follow suit.

UNDERMINING U. S. DYE INDUSTRY

The efforts of importers and dealers in dyestuffs to defeat the Longworth bill are exposed by Dr. Charles H. Herty in "The Journal of Industrial and Engineering Chemistry," published by the American Chemical Society, in an article headed "Kicking Up the Dust." After paying his compliments to the rumor mongers who circulate false reports and make statements that stop just short of libel, Dr. Herty explains the attempt of Kuttroff, Pickhardt & Co., New York, to stealthily undermine the dye industry in the United States. He says in part:

"On October 4, 1919, just two weeks after we had settled down in Paris, there had been secured proposals which would have covered the needs of all American consumers of vat dyes for the next six months. It remained only for some authorized body to close the deal. Meanwhile the allocation certificates had been issued to individual consumers to import through any commercial channel. Confusion and delay ensued. Gradually it was realized that by uniting upon the Textile Alliance, Inc., which had been designed by the State Department to receive the Reparation dyes, quick

action and very reasonable prices could be obtained. Mr. Metz saw this and at once assigned to the Textile Alliance all of the allocation certificates which had been turned over to him. The case was different with Kuttroff, Pickhardt & Co., who held a large number of these certificates, turned over to them by consumers. Only on request of individual consumers did they assign their certificates to the Textile Alliance."

HEAVIEST HOLIDAY TRADE EVER KNOWN

Early in 1919 apprehensions that general and severe business reaction might accompany the transition to a peace basis seemed not wholly unfounded when the formidable problems of readjustment were considered, says "Dun's Review," and for a time after the signing of the armistice in November, 1918, a decided halting of industrial and mercantile operations was witnessed in not a few quarters.

Before the Spring of 1919 had fairly started, there had come a reversal of sentiment that resulted in a reawakening of activities which at the outset was gradual and checkered, but which steadily widened in its scope and influence until business in many lines had assumed boom characteristics by the Summer. The impulse behind the commercial expansion, which continued throughout subsequent months of the year, had its beginning in the removal, one by one, of the regulations and restraints of the war period; and when the enormous buying power of the public, largely restricted during the national emergency, reasserted itself, both in the manufacturing and agricultural sections, urgent bidding for commodities began.

With a shortage of goods soon disclosed, and with outputs materially curtailed by labor unrest that later grew more and more menacing, markets that had been depressed quickly became buoyant, and price yielding was succeeded by a rise to unparalleled levels. The year ended with conditions not only having manifested far more stability than had been thought probable twelve months previous, but also with the heaviest holiday distribution ever known.

LABOR NOT DOING ITS SHARE

The Federal Reserve Board, in its review of December business conditions as they appear in the several Reserve Bank districts, says cautious manufacturers are unwilling to commit themselves far in advance. Credits have been shortened, and uncertainty as to the changes which may come within the next three months is forestalling the expansion in trade naturally to be expected as the Nation gets back more nearly to its peace-time activity.

The high cost of living was referred to as an "unquestionable menace."

Labor unrest showed some abatement during the month, but the greatly reduced production of the preceding month was not by any means fully restored.

"From many sections," the Board asserted, "it is reported that the chief difficulty does not lie in systematic strikes, but in the indisposition of workers to increase production and keep steadily at work. The reduced output as a result of very short hours, or the suspension of work for a given number of days a week, has proved to be a national problem. The disposition of labor to pursue such a policy is ascribed by many to high wages and the desire to employ the increased purchasing power thus obtained in the purchase of leisure rather than goods."

Practically every Federal Reserve District reported that "skilled labor was working only a sufficient number of days to keep going," resulting in a consequent falling off in production.

Progress in American Dyestuffs

*New Colors Produced Successfully and Prices Lowered
in Spite of Higher Cost of Crude Materials*

(Copyright, 1920, DRUG & CHEMICAL MARKETS)

A MERICAN dyes are in such strong request that manufacturers find difficulty in meeting the requirements of textile and other industries on many of the important colors. Consumers are in the market for long-time contracts, something unusual compared with conditions a year ago. This situation has been brought about by the concentrated efforts of American chemists who are producing dyes that are the equal, type for type, of the German dyes. The demand has not been confined to American consumers, for European buyers have been very active in the American market.

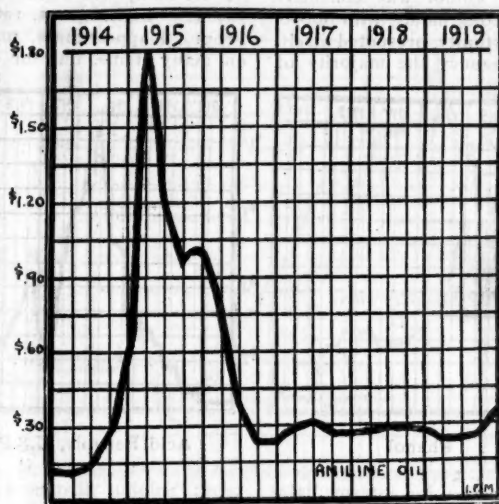
Prices have been steadily declining, until they have reached levels that satisfy most consumers, although there are a few who still insist that quotations are high. Compared with pre-war prices this is true, but production costs are higher, and some crude materials are difficult to obtain. It is probable that prices will go lower because producers are overcoming the difficulties met in the beginning. Today the American manufacturer is able to go ahead in the development of new dyes, without the financial losses he encountered at the start because of lack of experience.

Constant research work is going on in practically all the dye plants, perfecting and improving the processes for making dyes already on the market. Considerable progress has been made during the year in the development of vat colors. The subject is of considerable interest at this time, because the supply of vat dyes expected from Germany will be exhausted in a few months. It is only a matter of time when the Ameri-

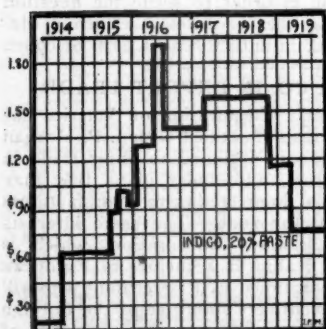
can manufacturer will be in a position to supply the vat dyes needed in this country, but considerable expense must be incurred to get the results that American chemists are seeking.

The American public knows the necessity for an independent dye industry in this country, and complaints about colors fading or not being the equal of German dyes are less frequent. Congress is responding to the demand for protection, and the licensing plan has already been approved by the House. Because of the depreciation of the mark, it is very clear that the only means by which adequate protection can be given is by the licensing plan.

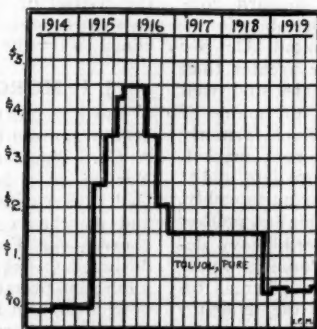
The market on coal-tar crudes has shown no spectacular developments over the year. Prices today are for the most part practically the same as during the early part of January, 1919. The demand during the spring was slow, and stocks on most of the items were in heavy supply. Prices declined steadily during the spring on practically all the crudes, with the exception of benzol and toluol. Naphthalene flake sold around four cents owing to the heavy supplies and lack of demand. Phenol, which was probably in greater supply than any other commodity on the market, dropped to 7c per pound. Production on phenol has been at a standstill ever since the signing of the armistice, because of the tremendous supplies held by the Government, and which were finally placed in the hands of a large American chemical house for distribution, with the understanding that none of the material was to be exported. As a result the domestic market will be well supplied with phenol for some



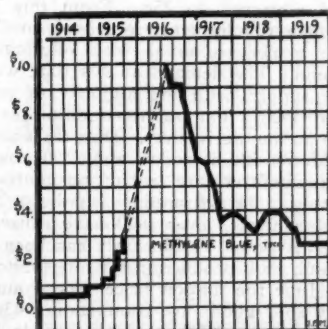
Aniline Oil Price Fluctuations



Indigo, 20% Paste



Toluol, Pure



Methylene Blue, Tech.

time. The foreign demand for phenol has been fairly active at all times, especially from Japan, but sales were generally confined to odd lots which brought high prices compared with the cost of material for domestic use.

Not until the recent coal and steel strikes did coal-tar crudes become active. The majority of holders were selling heavily on contract to manufacturers of intermediates. The steel strike cut severely into the production of important crudes, with the result that spot supplies of benzol commanded 40c a gallon during the tightest period of stringency. Toluol was considerably higher, especially among second hands, who boosted the price whenever the opportunity presented itself. However, during the acute stringency the majority of first hands continued to quote at unchanged levels and did everything within their power to see that the dye industry was well protected. It was not until recently that prices of benzol, toluol and naphthalene advanced materially. The cost of coke oven plants has increased three times during the last two or three years. At present supplies of the various crudes are light and very firm.

The rapid recovery of the market for intermediates since last spring has proved very surprising to both the producer and consumer. During the early part of the year prices declined steadily. Stocks were heavy, and shading was current among manufacturers. However, with the signing of the armistice the manufacturer of dyes was given an opportunity to obtain crude material with ease, compared with conditions during the war, when many dye manufacturers were forced to suspend operations because important intermediates were commandeered by the Government. On the other hand, with the beginning of 1919 many intermediate plants were forced to suspend operations because of the heavy Government stocks available which were offered at very low figures. Aniline oil declined to about 20c, and the demand was so light and the price so low that many producers of the oil suspended operations. During this period the demand from abroad for the oil and its derivatives was stronger, and this branch of the industry expanded rapidly. About June the oil began to show signs of scarcity, and in August the price had advanced to 25c. From this time onward consuming requirements increased, until September found the market nominal with offerings around 32c per pound. The demand at this time was far greater than the supply, with the majority of producers sold well into 1920. The same condition existed on many of the aniline derivatives. Dimethylaniline which formerly sold for 58c is today about 90c on the spot market. Manufacturers are tied up on contract until late in the spring. Paranitraniline has been advancing steadily, and contracts over 1920 have caused a higher market at this time. Aniline salt has been in very heavy demand, with production far inferior to consuming wants. In June the market price was around 26c, whereas today spot goods are commanding 43c and the tendency is upward. Higher cost of crude materials has been a strong factor in price advances, but the real cause is probably the heavy consuming demand from domestic

and foreign consumers. England and Japan have been constant buyers of American-made intermediates. England was in the market recently for large tonnage of various intermediates, but owing to the acute stringency in the domestic market, the majority of manufacturers have refused to sell for export.

At the present time a sold-up condition exists on many of the important commodities. H-acid has advanced rapidly, because of the heavy demand and limited production. This is also true of alphanaphthylamine, paratoluidine and many others. The shortage is felt by many dye producers, who have been willing to pay very high figures, rather than suspend operations. From all appearances, prices will probably go higher on many items, but for the most part a firm market

will be in evidence for many weeks to come.

During the past year new dyes have constantly been developed and placed on the market by leading firms. The most important dyes are: Cotton Blue B., an acid blue that is of special interest to the silk industry, paper manufacturers and ink manufacturers; Niagara Blue G Conc., a direct color practically identical with the pre-war

type; Sulphur Brown 3 B, which is very similar in shade and properties to a pre-war color known as Katigene Red Brown; Alizarine Orange R P. Paste, a wool color possessing excellent fastness to both light and washing. Dyed upon an alum mordant, it produces orange, and combined with chrome, a reddish shade is produced. Because of its very good fastness to washing, it finds considerable application in calico printing.

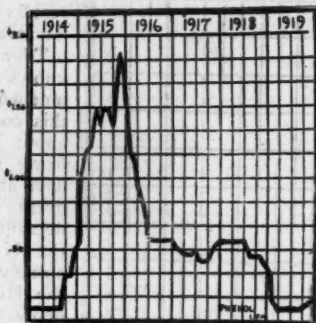
JURY IN SACCCHARIN SUIT DISAGREES

St. Louis, Jan. 6.—The test case brought by the Government against the Monsanto Chemical Works concerning the label used on saccharin which has been on trial here for several weeks ended in a disagreement of the jury. The Government officials attempted to prove that saccharin is harmful when used in food. The burden of proof was on the Government officials, who brought the suit under the Pure Food and Drugs Act.

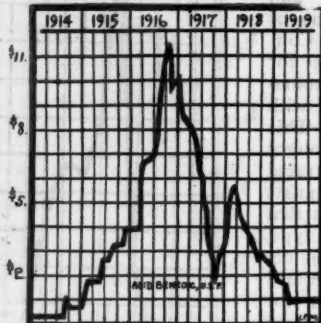
The case has been pending since 1916. Immediately upon the disagreement of the jury the Monsanto Chemical Works requested the court to proceed at once with the re-trial of the case in order to settle the question as soon as possible, but the Government attorneys declined to try the case again until the next term of court.

J. P. MORGAN & CO. IN EXPORT TRADE

The Foreign Commerce Corporation of America has been organized by interests identified with J. P. Morgan & Co. The corporation is designed to enter trade in Europe on a large scale, and under plans that may lead to the extension of long credits to manufacturers and merchants in the war zone. The same interests control the Foreign Finance Corporation, which is designed to engage in dealing in securities of European public and private corporations. E. R. Stettinius who will be chairman of the Executive Committee of the Foreign Commerce Corporation, was the purchasing agent of the British Government in this country prior to the entry of the United States into the war.



Phenol



Acid Benzoic, U.S.P.

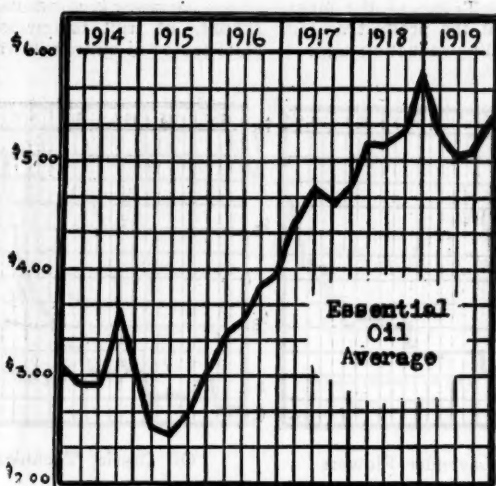
Essential Oil Prices During 1919

*General Level on January 1, 1920, was Six per cent.
Lower than at Beginning of Last Year*

(Copyright, 1920, DRUG & CHEMICAL MARKETS)

ALTHOUGH the past six months have been characterized by steady advances among the essential oils, a rough average of twenty leading products of the group shows that the general level of prices on Jan. 1, 1920, is approximately six per cent lower than at the beginning of 1919. The steady rise since June just failed by a slight margin to bring the average of prices back to the level of a year ago. For the first half of 1919, the essential oil group fell off about thirteen per cent. The upward movement during the last six months recovered a trifle more than half of the decline, leaving prices at the end of the year about six per cent below the figures of December, 1918, the latter being on record as the highest peak which has been reached at any time during the past thirty-five or forty years.

For the purpose of portraying graphically in a very general manner the fluctuation of essential oil prices during 1919 as compared with the five years preceding, the accompanying so-called average chart has been prepared. The prices of the following twenty products, as representative of the group, have been averaged monthly and the results shown in this diagram: Oils of peppermint natural, cedar leaf, sassafras natural, wintergreen synthetic (methyl salicylate), eucalyptus Australian, almond bitter, cassia technical, lemon U. S. P., orange West Indian, bergamot, cloves, sandalwood East Indian, geranium Bourbon, citronella Ceylon, juniper berries rectified, lavender flowers U. S. P., mustard artificial, anise U. S. P., caraway rectified and rose French. Individual charts have been prepared for



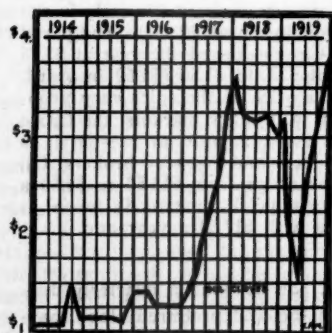
Average Essential Oil Prices
Since 1914

oils of peppermint, cloves, lemon, lavender flowers and cassia, because of exceptional fluctuations or of general representative activity during the year.

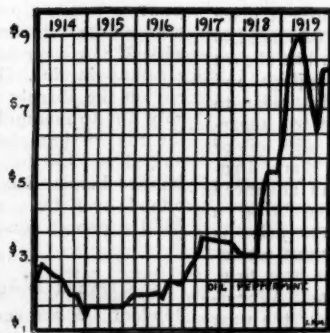
The outstanding feature of the market during 1919 was, perhaps, the general shortage of supplies which characterized the industry in this country almost continuously throughout the last five or six months of the year. Curtailed production of some domestic products, coupled with restricted importations of a great many others, due fundamentally to labor shortage, strikes and general unrest, has been the main factor in the advancing prices which have been noted for the closing months of 1919. From January until June, prices as a whole moved downward, owing principally

to a marked falling off in buying, general business lethargy and somewhat of an improvement in supplies. Realizing later in the year that the genuinely lower prices for which the consuming trades waited, and about which there was a great deal of discussion, were more or less of a myth at that time, buyers re-entered the market, and absorption of stocks by consumers showed a steady increase. As supplies were taken up, reduced production and importations failed to replace them with sufficient rapidity and prices climbed upward. Hand-to-mouth purchases, small in quantity and for immediate requirements only, have been the order of the year. Buyers at no time lost sight of the fact that if, by any chance, prices should decline, they wanted stock-rooms to be as bare as possible.

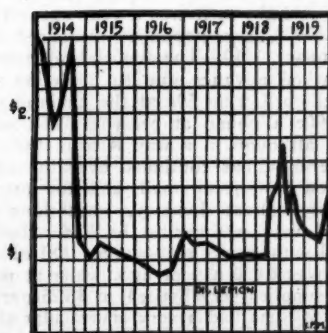
Among the domestic products which have developed scarcities during the year are cedar leaf, cedar wood,



Oil of Cloves



Oil of Peppermint, Natural



Oil of Lemon

sassafras, spearmint, wintergreen, sweet birch, wormseed and pennyroyal. The imported items are more numerous and include lavender flowers, Australian eucalyptus, bois de rose, petit grain, sweet and bitter orange, bay, coriander, lemongrass, linaloe, patchouli and cubebs.

From \$5.50 a pound at the beginning of the year, natural oil of peppermint jumped to \$9.00 in April-May. The arrival of the new crop oil eased the price down to \$6.50, but this did not last very long and by October it had rebounded to \$8.00, holding near this figure at the completion of perhaps one of the most spectacular years in the history of the product as far as prices are concerned. The 1919 production aggregated 300,000 pounds,

which should have been sufficient to bring the price down considerably below the present level, but the large Middle West producers hold that the bulk of the crop was sold immediately after it had been distilled, and their strong financial position enabled them to enforce this view by maintaining the price firmly at the existing figures. Buying on the part of any except the largest consumers has been practically inhibited by the price. An example of the attitude of consumers is shown by the fact that one of the leading users of U. S. P. peppermint oil, in order to reduce stocks before moving to another city, offered over 5,000 pounds of their excess supply about two months ago at a figure more than 50c a pound below producers' price and as yet have been unable to dispose of the goods. While in consuming circles it is predicted that the carry over by producers from 1919 to 1920 will be very heavy, the latter maintain that they have sold practically the whole 1919 crop and show no disposition to contradict this by reducing prices.

Other domestic oils which have attracted attention because of the short supplies in the city markets and meagre production in the country are cedar leaf and sassafras. The former was quoted at \$1.10 a pound last January, while today it has doubled in price and is quoted at \$2.25. Cedar wood oil has become exceptionally scarce during the latter months of 1919 and has gone from 20c up to 30c a pound at present. Natural oil of sassafras, although scarce at present, is not quite as tight as it was a year ago. The current price is \$1.80@2.00 a pound as compared with \$2.25@2.40 in January, 1919. The artificial oil, however, has shown a marked advance due to depletion of supplies and has climbed from 50c at the beginning of last year to 85c@90c a pound at present. The scarcity of spearmint, although in a way it is in the class with oil of peppermint, has continued over the whole year. Production has been small, and the price has advanced steadily. Last January, quotations named \$5.50 a pound with nothing to be had. Today the price is \$12.50 with stocks still scarce. Oil of American wormseed was \$4.50 a year ago, while at present it is firm, with supplies very limited, at \$6.25 per pound. Wormwood oil has had a very spectacular rise over the past few months. From \$5.50, the price has moved upward

to \$12.00 over the year, the bulk of the advance taking place, however, since October. Distillation of sweet birch has been light for some time and the price tight. Today \$6.00 a pound is quoted. Genuine gaultheria has been very scarce and has risen from \$7.50 to \$10.50 since last January. Methyl salicylate was quoted at \$1.00 a year ago. Today it is 80c a pound for the U. S. P., after having dipped to 40c back in August.

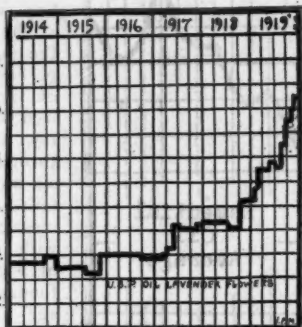
The Messina essences have, perhaps, been of most general interest among the imported essential oils. The orange oils have been the most active during 1919, the prices advancing steadily throughout the year. The scarcity of fruit for pressing purposes has been the chief factor in cutting down the output of oil and causing

shortage both in the West Indies and Sicily. The crops of 1919 were generally short, and growers were able to get a higher price for the fruit as such than by pressing for oil. Prices today as compared with a year ago are nearly double. West Indian sweet was \$1.85 last January, while now it is \$3.75 @ \$4.00 a pound. The Sicilian was \$3.00 and is \$5.00 at present. Bitter oil was \$2.00, while today it is \$4.00.

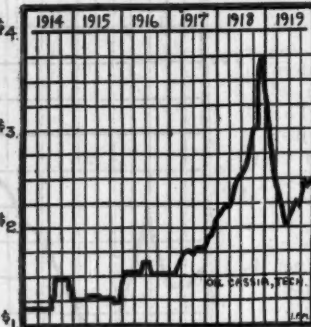
A year ago oil of lemon was quoted at about \$1.85 and higher. The descent during the year, except for a flurry in March, has been steady, the price touching \$1.15 a pound in October. From that time until the present, the trend has been upward, the present quotations naming \$1.45 and up, according to brand. Sicilian producers have been exerting every influence during the past three or four months to drive the price up and have succeeded somewhat. Oil of bergamot has been in little demand during 1919, and supplies have been more than sufficient. As a consequence, the oil has been weak throughout the year, dropping from \$7.00 a pound last January to \$4.50 in September-October. It has recovered slightly and now stands at \$4.75@5.00.

Oil of lavender flowers has advanced steadily during 1919 on the strength of under production in France. Manipulation of the small supplies has also been another effective measure in driving the price up. From \$6.50@7.00 a pound in January, it has moved up to \$10 @ \$11, the latter as to quality and seller. Bois de rose has risen on scarcity from \$5.00 a pound at the beginning of 1919 to \$10.50 at present. Citronella, Ceylon, went up to 65c a pound, in drums, from 40c early in the year. Cassia technical is lower at \$2.35 as compared with \$2.85 a year ago. Cloves opened the year at \$3.25 a pound in tins. It dropped to \$1.50@1.60 in April, but on the sharply higher price of the spice very probably due to manipulation in primary markets, the figure for the oil has climbed steadily, until at present it is named at \$3.90 by producers and \$3.60 by brokers. Oil juniper berries has come down from \$11.50 to \$6.50 a pound over the year. Artificial mustard is lower at \$8.50 a pound compared with \$17.50 a year ago.

The United Drug Co. has declared a quarterly dividend of 1¾ per cent on the first preferred stock, payable Feb 2, to stockholders of record Jan. 15.



Oil Lavender Flowers



Oil Cassia, Technical

Year of Great Activity in Fatty Oils

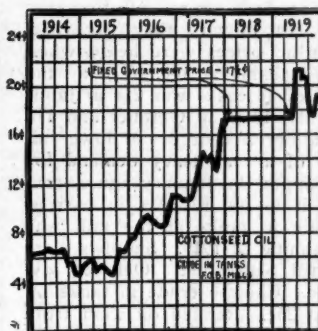
Heavy Imports of Many Vegetable Oils Little Used Here Before the War

(Copyright, 1920, DRUG & CHEMICAL MARKETS)

THE peak of the 1919 fixed oil markets both from the point of view of prices and volume of business was reached along in July. Both June and July of the past year saw one of the most active buying sessions which producers here have seen for some time. With the arrival of the climax of a strong market at the end of July, the reaction set in, induced principally by high prices here and a shut down of European purchasing as their exchange began to toboggan, and the New York oil market entered upon one of the duller periods it has experienced. Of course, there have been exceptions, but the general tendency of the market since August has been easier, although prices have been maintained exceptionally well in the face of meagre demand. Accumulations of stocks at no time have grown very large, and while buying inquiry was active during June and July, there were far from sufficient supplies to take care of the demand.

The most interesting point of the year's oil market is very well illustrated by the comparison of extracts from three reports published at the end of July and early in August. On July 30, the report stated as follows:

"The feverish activity which has characterized the fixed oil markets here for the past two months or so seems to have become a steady affair with little or no let-up. Trading is brisk at continually advancing prices, with a consuming demand which still appears to be practically insatiable. Crushers are getting such a tremendous volume of business that it is impossible for them to even make an attempt to handle it all. Demand for both export and domestic use is more than double the available supplies."



Coconut Oil, Ceylon

Cottonseed Oil, Crude

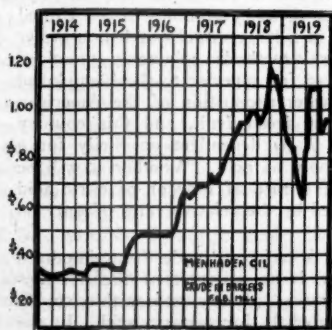
just temporarily stopped buying, from all appearances, and at the limited rate which they were able to acquire goods for some time past, it is believed that the present slowing up is merely a lull of short duration."

A week later, a further and more pronounced development in the reaction is shown by the tone of an extract from the market report of that week, August 13th, given below:

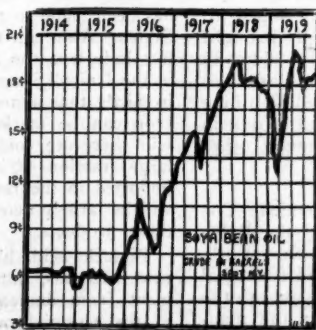
"Among the animal, fish and vegetable oil markets during the past week, a slight tendency to ease off in the prices of some products was noted among second hand holders. Crushers and refiners, however, are maintaining their former quotations without change, offerings below the market figures being made chiefly by nervous re-sellers who have been watching closely for the first indications of a reaction."

"The volume of business has become considerably reduced since the middle of last week, and the oil market in general is seeing the quietest period just at present which has been noted for several months."

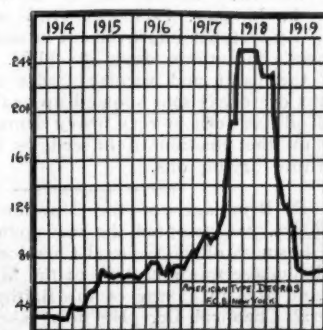
Early in January, 1919, prices were about evenly divided as compared with to-day, some being higher and some lower. Coconut oil has been a leading factor in the market throughout the year. A year ago the price for Ceylon oil domestic pressed in barrels on the spot was about 17c a pound. For tanks, the price was 15½c. In June, they were 17½c and 16½c respectively, in



Menhaden Oil, Crude



Soya Bean Oil, Crude



Degras Oil, American

October 18c and 17c while to-day they stand at higher levels, 19½c for barrels and 19c for tanks in New York. Soya bean oil has moved close to coconut. In January the price for crude oil in barrels in New York was 15½c while for tanks on the Coast it was 13c. It went as high as 18½c and 16c at the July peak but down again to 17c and 15c in October. Today it is 18c for barrels spot and Coast tanks are named at 16c. Olive oil denatured was \$4.25 last January. It dropped to \$2.25 by June, went up to \$2.50 in July and has remained there. Foots have been scarce all the year and practically nominal. In January they were 35c. From March till October no prices were heard when some small lots became available at 18c. To-day the price is 19c. Lagos palm oil in casks was 21c in January, 16c in June 17c in July, 17½c in October and 17c to-day. Niger oil was about a cent or so lower all the way. The cessation of a real heavy demand for castor oil early in 1919 dropped the January figure from 40c to 21c. At present it is 20c for AA in barrels. Peanut oil crude domestic in tanks at the mill was quoted at 17c at the beginning of 1919. Supplies were cleaned out from June till September. October saw 22c and the present 23½c. Chinese crude in tanks on the Coast is to be had at 23c. Refined oil went from 22c in January up to 30c in July, dropped to 25c in October but has recovered to 28c to-day. Corn oil has been very scarce for some time. Prices through the year for the crude and refined in barrels respectively were 18c and 21½c in January, 20c and 25c in June, 23c and 28½c in July, 16c and 22½c in October and 19c and 23½c to-day.

The animal oil market has reflected closely the course of tallow, stearines and greases. For edible tallow, the market hit 25c in June, dropped to 21c in August, 20c in October and closed the year at 17½c. City tallow was 12c in January, went as high as 18½c in October and is now down to 14c. American degrass was 18c at the beginning of the year. The English style was 28½c. By June they were down to 6c and 9c respectively and closed the year at 7c and 8c. Neats-foot, 20-degree cold test pure came down from \$3.15 last January to \$2.25 today. The prime also declined from \$2.25 to \$1.75. Red oils and lard oils closed the year very close to the levels of last January. Menhaden crude oil was \$1.05 and \$1.00 respectively for Southern in barrels and Northern in tanks. Both touched \$1.15 per gallon in July and are now 90c@95c. Cod oil was \$1.55 for the Newfoundland and \$1.45 for the domestic at the opening of the year. They are now \$1.12 and \$1.10 per gallon.

Linseed oil has been marked by a shortage of both seed and oil over practically the entire year. The condition became acute along in June-July and with crushers naming \$2.22 per gallon for barrels in car lots, there was little or nothing to be had outside. The figure in January, 1919 was \$1.55 which climbed to \$2.22. By October improvement in seed supply brought crushers' quotations down to \$1.72. Active demand from the paint and varnish trades for the last two months or so has sent spot oil up again to \$1.87. China wood oil has been in very heavy demand and strong in price on the position of linseed, as have many other substitute drying oils.

E. F. Brundage, of the Maryland Chemical Co., Baltimore, has accepted the management of the Baltimore business of the General Chemical Co., New York. Mr. Brundage was secretary of the Maryland Chemical Co., and also in charge of the Baltimore plant of the General Chemical Co. He now takes over the management of the General Chemical Co.'s office in conjunction with his work as superintendent of the plant.

TARIFF BOARD'S REPORT ON ACIDS

Development of Plants for Producing Formic, Oxalic and Gallic Acids in the United States—Increased Demand for Gallic Due in Part to Dye Industry

In its third annual report submitted to Congress with the close of 1919 the United States Tariff Commission outlines the work of the Commission on acids dutiable under paragraph 1 of the tariff act of 1913, as well as the raw materials from which such acids are made, and several closely allied commodities which are dutiable under other paragraphs. This report has been sent to the Government Printing Office and will soon be available for distribution. The commission says:

These acids present tariff problems of a most varied character. In several cases there were notable developments of the industry in the United States during the war. This was particularly true with reference to formic, oxalic, and gallic acids. These acids, formerly almost entirely secured from Germany, are now being made in the United States in substantial amounts.

Formic acid was controlled by the German industry before the war, not through lack of essential raw materials in other countries, but because German chemists had discovered and developed the best-known method of making sodium formate, which serves as the basis for making formic acid. Formic acid was made in the United States before the war from imported sodium formate. The Germans had an advantage in technical experience and commercial connections that would have made it difficult for any American manufacturer to make a successful start in this industry, if competition from Germany had not ceased. During the war the complete process of making formic acid from caustic soda and coke has been developed in the United States.

Oxalic acid is closely related to formic acid, since sodium formate is also the basis of one of the methods for its manufacture. During the war a promising beginning was made in the United States in the manufacture of oxalic acid by this method from locally available raw materials. The process in use by the only American manufacturer before the war depends upon heating sawdust with caustic potash imported from Germany or made in this country from imported German potash salts. The scarcity of potash seriously affected the industry and caused the price of oxalic acid to increase sixfold. During 1918 and 1919, however, large importations from England, Norway, and Holland have brought the price down to a somewhat lower level.

In the case of citric acid the American industry has been dependent on citrate of lime imported from Sicily. Citrate of lime is made from "cull" lemons and may thus be regarded as a by-product of the lemon-growing industry. It is only in recent years that any attempt has been made to recover these by-products in the United States. Although there is a large American lemon-growing industry, the cultural methods commonly practiced in the United States are so far superior to those employed in Sicily that a much larger proportion of the American crop can be marketed as fresh fruit, and this country will therefore continue to be dependent on Sicily for a large fraction of its supply of acid. Whether it will be imported in the form of citrate of lime or of citric acid will be largely determined by the relative rates of duty on these products.

Tartaric acid, like citric acid, is made from imported raw materials, but there is no prospect of the development from domestic sources of any appreciable supply of the essential raw materials for tartaric acid. In the past the margin of duty has been so adjusted that nearly all the imports have been in the form of crude materials.

The raw materials are by-products of the wine industry, and carry an ad valorem rate of duty. The products made therefrom, especially tartaric acid and cream of tartar, are dutiable at specific rates. The advance in prices which has occurred since the passage of the tariff act of 1913 has, in effect, diminished the margin of protection. Italy, which is one of the large sources of supply, has imposed a small export duty on the raw materials, but no export duty on the finished products, and this has had the effect of further decreasing the effective margin of duty in the United States.

Tannic acid, gallic acid, and pyrogallic acid are derived entirely from nutgalls which are also imported raw materials. "Tannic acid" and "extract of nutgalls" are essentially similar articles. The former is usually a somewhat purer and better grade than the latter, although there is no sharply defined difference. There is, however, a large difference in the rates of duty, tannic acid being dutiable at 5 cents per pound and extract of nutgalls at three-eighths of a cent per pound. The growth of the new American dye industry has greatly increased the demand for gallic acid.

The following products are still under inquiry and the results will be published in a later report:

Acids: Salicylic; Agar-agar; Alizarin assistant; Amber, Amberoid, unmanufactured; Anilin; Oil, Salts; Artists' paints, colors and pigments; Balsams: Copaiba, Canada, Peru, Tolu; Castile soap; Chromium, colors; Civet; Coca leaves; Cosmetics; Dyewoods, extracts of; Enamel paints, Enamels; Extracts; Chlorophyll, Dyeing; Gelatin, manufactures of; Gentian leaves; Glazes; Glue; Gum Arabic; Ink, Ink powders; Isinglass; Logwood, extract of; Musk; Ocher and ochery earths; Oils: Cod and codliver, Linseed, Olive, Palm, Palm kernel, Peanut, Peppermint; Perfumery; Sarsaparilla root; Sienna, earth; Soap: Castile, Medicinal, Powder, Toilet (perfumed), Toilet (unperfumed); Umber and umber earths; Vanilla beans.

This census for 1918 shows that there is no insuperable obstacle to the growth of the dye industry in the United States. The finished products are now made almost entirely from American raw materials and intermediates. One hundred and seventy-six intermediates were made on a commercial scale, and in addition 23 others were made in relatively small quantities for sale, research, or experimental purposes. The intermediates most needed are now available, although many important ones are still missing, and the prices of many most needed are still abnormally high. The report shows that there were over 200 firms, including 78 manufacturers of dyes, that manufactured coal-tar chemicals in 1918.

The total production of dyes in 1918 was 58,464,446 pounds, valued at \$62,026,390, which is an encouraging gain over the 1917 output. The report also shows that, with comparatively few exceptions, prices of individual dyes were lower in 1918 than in 1917 in spite of the general rise in wages and in prices of most other commodities. More than 300 different dyes were made in the United States during 1918. Many of the dyes which were lacking in 1917 appeared on the market in 1918. The report shows that the American industry is especially strong in the classes of dyes known as "azo," "sulphur," and "induline" dyes. Alizarin and two alizarin derivatives were made, but in amounts considerably below the normal demand. These dyes are an important group of fast mordant dyes for wool. No dyes derived from carbazol were made in 1918, and only a bare beginning was made in the production of the extremely important class of vat dyes derived from anthracene, known as indanthrene dyes, which are fast dyes for cotton.

Financial Notes

Among the securities sold at the Auction Salesroom, 14 Vesey street, New York, last week, were 242 shares of first preferred stock of the Independent Chemical Co., Inc., which brought \$40 per share. The company's New York office is at 122 West street.

The National Licorice Co. has declared an extra dividend of 2 per cent in addition to the usual semi-annual dividend of 2½ per cent on the common stock, both payable Jan. 7 to holders of record on that date. An extra dividend of the same amount was declared six months ago.

The American Trading Company has announced payment of the annual 2 per cent quarterly dividend on its \$2,500,000 preferred stock, and in addition a 4 per cent dividend on the \$2,500,000 stock of the company from the 1919 earnings. This dividend is payable Jan. 15.

At a special meeting of the stockholders of the Minard Liniment Manufacturing Co. in Boston recently it was voted to change the name to Minard Co.; to increase the preferred stock from \$20,000 to \$100,000 made up of 10,000 shares, par value \$10 each. Dividends will be at 8 per cent per annum, payable quarterly, cumulative.

QUOTATIONS ON CHEMICAL STOCKS

	Bid	Asked		Bid	Asked
Aetna Expl.	7½	8	H'k Electro.	70	75
Aetna Expl., pf.	67	68	H'k Elec., pf.	65	75
Air Reduction.	48	51	Heyden Chem.	5½	6
*Am. Ag. Ch.	93	95	*Int. Agricul.	19½	21
*Am. Ag. Ch., pf.	96½	97	*Int. Agricul., pf.	30	31
*Am. Chicle.	87	89	*Int. Nickel.	24	24½
*Am. Chicle, pf.	80	84	*Int. Nickel, pf.	90	90
*Am. Cot. Oil.	83	84	*Int. Salt.	70	71
*Am. Cot. Oil, pf.	88	90	K. Solway.	80	110
*Am. Cyan.	30	35	*Mathieson Alk.	38½	40
*Am. Cyan., pf.	55	62½	Merck & Co., pf.	93	98
*Am. Druggists S.	12	12½	Merrimac.	89	92
Amer. Glue.	40	45	Mulford Co.	55	60
Amer. Glue, pf.	65	70	Mutual Co.	150	...
*Am. Linseed.	75½	76	*Nat. A. & C.	72½	73
*Am. Linseed, pf.	83	96	*Nat. A. & C., pf.	89	90
*Am. Malt.	44	47	National Lead.	81	83
Amer. Zinc.	18	18½	National Lead, pf.	108	110
Amer. Zinc, pf.	52	56	N. J. Zinc.	270	275
Atlas Powder.	150	160	Niag. A., pf.	95	100
Atlas Powder, pf.	88	91	Parke, Davis & Co.	128	130
*Barrett Co.	132	135	Penn. Salt.	78	78½
*Barrett Co., pf.	113	114	Procter & Gamble.	676	695
British Am. Chem.	7½	8	Procter & Gam., pf.	101	101½
Rutterworth-Jud.	33	35	Rollin Ch.	50	60
By. Prod.	110	116	Rol. Ch. pf.	80	90
Carborundum.	135	139½	Royal Baking Po.	135	145
Carborundum, pf.	115½	116	Royal Bak. Po., pf.	92	94
Casein Co.	40	48	Semet S.	160	173
Celluloid Co.	135	145	Sherwin-Williams.	520	540
Celluloid, pf. ....	...	...	Solv. Proc.	180	...
Corn Products.	86	87	Stand. Ch.	90	100
Corn Products, pf.	107	109	Swan & Finch.	100	115
Davison Chem.	24½	35	*Tenn. C. & Chem.	10½	11
Dow Chem.	175	200	Tex. Gulf. Sul.	154½	154½
Dow Ch., pf. ....	...	103	Union Carbide.	74	75
Du Pont.	360	380	Union Sulphur. ....	...	...
Du Pont, deba., pf.	92½	93	*Un. Drug.	140	143
Du Pont, C., pf.	9	10	*Un. Drug 1st pf.	51½	52
Freeport, Tex., Sul.	34	35	*Un. Dyewood.	50	61
Freeport, Tex., Sul. pf.	91	93	*Un. Dyewood, pf.	90	96
*Gen. Chem.	185	200	U. S. Gypsum. ....	...	...
*Gen. Chem., pf.	97	100	*U. S. Indus. Alco.	114	115
Grasselli.	175	180	U. S. Indus. Al., pf.	100	108
Grasselli, pf.	101	102	Va.-Car. Chem.	70	71
Hercules, Powder.	220	226	*Va.-Car. Ch., pf.	108	112
Hercules, Powd., pf.	107	110	V. Vivaudou.	20	20½

BONDS

	Bid	Asked
*Am. Agricul. Chem., 1st conv. 5s, 1928.	97	99
*Am. Agricul. Chem., conv. deb. 5s, 1924.	100	101
*Am. Cotton Oil deb. 5s, 1931.	88	89
*Int. Agricul. Corp., 1st Mort. & Col. tr. 5s 1932.	83½	85
*Va. Carolina Chem., 1st Mort. 5s, 1923.	94½	96
*Va. Carolina Chem., conv. deb. 5s, 1924.	101	102

*Listed on New York Stock Exchange

The Drug and Chemical Market

Current Spot Quotations of Pharmaceuticals, Page 28; Crude Drugs, Pages 30-32; Essential Oils, Page 34

MANY DRUG PRODUCTS LOWER

American Manufacturers Cut Tartaric Acid, Citric Acid, and the Citrates—Norwegian Cod Liver Oil and Bismuth Salts Decline—Wood Alcohol, Formaldehyde and Glycerin Higher

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced	
Alcohol, wood, 12c gal.	Elecampane Root, 2c lb.
Pure, 20c gal.	Formaldehyde, 4c lb.
Antipyrine, 25c lb.	Glycerin, C.P., 1c lb.
Balsam Fir Canada, \$1 gal.	Dynamite, 1/2c lb.
Blueflag Root, 7c lb.	Mezereon, 2c lb.
Colchicum Root, 10c lb.	Pepper, White, Sing., 1c lb.
Cotton Root Bark, 10c lb.	Sandarac Gum, 5c lb.
Cubeb Berries, 3c lb.	Soap Bark Crush., 1c lb.
Culver's Root, 2c lb.	Tragacanth, No. 1, 25c lb.
Declined	
Acid Citric, 3c lb.	Iron Citrate, VIII, 3c lb.
Acid Tartaric, 5c lb.	& Ammon. Citrate, 3c lb.
Alolin, 5c lb.	Green Scales, 4c lb.
Bismuth Subnitrate, 25c lb.	Phosphate, 2c lb.
Subgallate, 45c lb.	Pyrophosphate, 2c lb.
Subcarbonate, 20c lb.	Mustard Seed, Eng., Yel., 1c lb.
Cantharides, Russ., 25c lb.	Orris Root, Floren., 2c lb.
Celery Seed, 2c lb.	Potass. Citrate, 3c lb.
Cod Liver Oil, Norweg., \$13 1/2 lb.	Quinine, 5c oz.
Dill Seed, 15c lb.	Rose Leaves, Red, 10c lb.
Dragon's Blood Reeds, 50c lb.	Soap, Castile, 2c lb.
Gum Mastic, 5c lb.	Sodium Citrate, 3c lb.
Haarlem Oil, Dom., 25c gross	Second Hands

Trend of the Market

	Today	Last Week	Last Month	Last Year
Acid Salicylic	5.53	5.53	4.48	4.87
Calomel	1.66	1.66	1.59	2.00
Camphor, Jap., ref.	3.40	3.20	3.60	2.40
Glycerin, C.P.	24	24	21	22
Menthol	12.50	12.50	13.00	7.00
Opium, Gum	6.75	6.75	7.00	22.50
Quinine Sulphate	.90	.95	1.10	1.10
Cantharides, Russ.	3.75	4.00	3.75	3.50
Ergot, Spanish	4.00	5.00	4.00	2.50
Buchu, Short	2.45	2.45	2.25	2.70
Ipecac, Cartagena	3.20	3.20	3.00	4.20
Rhubarb, H. D.	1.75	1.75	1.85	.85
Cloves, Zanzibar	.40	.51	.55	.41

Many important price changes have been noted among the fine chemicals and drugs during the past week. Business generally shows no unusual developments, moderate and conservative trading reported as moving a fair volume of merchandise. Scarcities of many items continue to attract the attention of the trade. There have been a larger number of price reductions this week than has been noted for some time past.

A further sharp advance in wood alcohol has been announced by producers which in turn has driven formaldehyde higher. Refiners have put the price of glycerin up again. Some of the bismuth salts have been sharply reduced. Manufacturers have cut the price of tartaric acid. Citric acid and the citrates have been lowered again by American makers. Second hand quinine is easier. Castile soap has gone down. There has been a sharp drop in the price of Norwegian cod-liver oil. Domestic Haarlem oil is weaker. Antipyrine has firmed up notably.

Among the crude drugs advances have predominated. Canada balsam fir is higher and very scarce. Cotton root bark has gone up as have mezereon and crushed soap barks. White tragacanth ribbons are again higher. Cubeb berries are firmer. Blueflag, colchicum, Culver's and elecampane roots have advanced. Gum sandarac and white Singapore pepper are up. Russian cantharides are easier. Dragon's blood reeds have come down

in one quarter. Gum mastic, Florentine orris, celery seed and dill seed are lower.

Fine Chemicals

Acid Tartaric—American manufacturers have reduced the price of tartaric acid to 69c a pound for U. S. P. crystals and 69 1/2c for powdered. Second hands have announced no change in the 70c@71c level which they have been quoting for some time. Importations of crude tartar last week included 521 sacks and 42 casks from Marseilles and 746 bags from Buenos Aires.

Alcohol—The acute scarcity of wood alcohol has compelled makers to advance the price sharply to \$1.56@1.60 per gallon for the 95 per cent and \$1.59@1.63 for the 97 per cent. Pure methyl spirit is available at \$2.05@2.10. In outside hands there is little or nothing to be had even at the premium figure of \$1.70@1.75 per gallon for the 95 per cent.

Aloin—On the increased supply and cheaper cost of aloes, makers have reduced the price of aloin to 90c@95c a pound.

Antipyrine—Reduction of spot stocks without additional supplies to replenish them has produced a decidedly firmer condition in the market for antipyrine. Most holders are asking \$6.00 a pound for their goods but it is stated that \$5.85 can still be done in some quarters.

Bismuth—Sharp reductions have been made in some of the bismuth preparations owing to the lack of demand and lower cost of the metal. The subnitrate has been reduced to \$2.75 a pound in 25 pound lots. The subgallate has been cut to the same level. For the U. S. P. subcarbonate, \$3.00 a pound is the new quotation.

Borax—Supplies are very sparse and difficult to find. Prices in most quarters for second hand material are over 9c. Producers quote 8 1/2c@9c a pound for crystals in barrels and 8 1/4c@9 1/4c for U. S. P. crystals in kegs, limiting orders at these figures.

Camphor—Japanese slabs show little change this week. Quotations for cases name \$3.40 a pound for slabs and up to \$3.50 for tablets. Importations last week totalled 1125 cases of crude from Chinese and Japanese ports and 300 cases of refined from Kobe. American refiners are delivering in better quantities at the present time at \$3.30.

Citrates—On the lack of interest in citric acid and its generally easy position at present, American manufacturers have cut their figures for the acid and also the citrates. For crystals in barrels, 84c a pound is named and 85c for the powder. No alteration in the 85c second hand figure has been noted but it will likely decline shortly. Sodium citrate, VIII, is now \$1.09 a pound while the granular IX is quoted at \$1.24. Potassium citrate is \$1.78 for U. S. P. Iron citrate is named at \$1.22 a pound with iron and ammonium citrate at \$1.07. The green scales at \$1.33, phosphate at \$1.04 and pyrophosphate at \$1.09 a pound.

Codliver Oil—The price for Norwegian oil is sharply lower at \$95.00@97.00 a barrel. Importations last week included 375 barrels from Christiania. Supplies in this market are notably larger with the consequent easier price. Newfoundland oil is steady without change at \$90.00@92.00.

Formaldehyde—On the scarcity and sharp jump in wood alcohol, formaldehyde has tightened up consider-

ably this week. Sales have been made up to 38c a pound and the general opinion seems to indicate that the price is very likely to go to 45c on a parity with the cost of methyl alcohol.

Glycerin—Glycerin is maintained in a very strong position. Refiners have just advanced the price for the C.P. to 25c a pound in drums. Down to 24c can still be done in outside hands. Demand is active. Dynamite glycerin is firm at 24c@24½c per pound.

Haarlem Oil—Owing to the good supply of haarlem oil here, the domestic is easier. Competition has also been a factor in sending the price down to \$3.50 per gross. Up to \$3.75 is asked for some brands. Imported is steady at \$5.50.

Quinine—There has been little change in the position of quinine this week. The product is still easy with offerings reported down to 90c per ounce in second hands for Java sulphate. Good sized lots are still available here. The Dutch syndicate has just advanced the price abroad and a turn about with an upward trend of prices in the near future on this market would not be surprising. American makers continue to restrict orders at the 90c figure. Thirteen cases came in from London last week.

Soap, Castile—White Castile soap is lower here on larger imports. Supplies are available here down to 26c a pound. Powdered is still named at 38c@40c for U. S. P.

Crude Drugs

Balsam Fir—Canada balsam fir is higher at \$14.75 a gallon and continues exceptionally scarce. Balsam Peru is also in very light supply and is firm at \$5.00 a pound.

Blueflag Root—The best price for such stocks as are obtainable here now is 45c a pound.

Cantharides—The high price of Russian cantharides has driven many to use the Chinese with a consequent falling off in demand for the former. The price has been reduced to \$3.75 a pound for whole and \$3.95 for powdered. Chinese are firm at \$1.40@1.45 for whole and \$1.55 for powdered. They are very liable to move higher.

Celery Seed—The seed is in a weak position and the price is lower. Quotations for good-sized lots name down as low as 30c. Up to 31c and higher is quoted also as to seller.

Colchicum Root—On the reduced supply here and advanced ideas of sellers, colchicum is bringing higher prices. Quotations range from \$1.60 a pound inside now up to \$1.65.

Cotton Root Bark—Due to inability to get people to collect the bark last fall and spring and the fact that it is now between seasons the price has gone up to 40c in some quarters. Others maintain that 26c can still be done on spot. Offerings of small lots at sharp advances in the country are noted.

Dill Seed—The seed is very weak with no demand at 11c a pound.

Dragon's Blood Reeds—A Philadelphia holder has dropped the price to \$2.00 a pound. Small lots still sell for \$2.50 here.

Gum Mastic—Down to 95c a pound can be done for mastic now. Some holders are asking \$1.00. Supplies are materially improved.

Orris Root—There have been heavy importations of Florentine orris root, and the price is easing off. At present 20c a pound can be done without a great deal of difficulty.

Tragacanth—A further advance in the price of white ribbons this week has brought the inside figure up to \$5.25 a pound. Some are naming \$5.50 for their goods.

Drug Trade News Notes

Raymond Cardona, of J. L. Hopkins & Co., sailed this week for South American ports.

The McNary bill, continuing the United States Sugar Equalization Board through 1920 has been signed by President Wilson.

F. A. and Hugo W. Druhl, Salt Lake City, Utah, have bought the interest of Walter F. Druhl in the Druhl Drug Co.

The Liquid Carbonic Co., 3100 South Kedzie avenue, Chicago, Ill., is to construct a gas manufacturing plant at Indianapolis, Ind., to cost about \$50,000.

The Gibson-Snow Co., Albany, N. Y., has purchased a building in Buffalo, for use as a wholesale drug house. The company owns a chain of wholesale stores in New York State, including Troy, Syracuse and Rochester. The business was established in 1829 at Albany. The Rochester branch was started in 1906.

The business conducted by John H. Yocum for nineteen years, at 325 Academy street, Newark, N. J., has been incorporated under the name of The Yocum Laboratories. The new corporation began business at the above address on January 1. On May 1, the corporation will take possession of its new laboratory at 168-178 Coit street, Irvington, N. J.

A vast conspiracy to flood the market with fake salvarsan has been discovered by the police of Munich, Bavaria. More than forty persons are under arrest, including a Government official, an army officer, two merchants and an artist. Large quantities of the fake medicines were seized. The fake salvarsan was being sold through secret channels.

The Duane Sugar Refining Co., of Connecticut, recently incorporated with capital stock of \$500,000 has bought the plant at Waterside, Conn., formerly occupied by the Synthetic Color Co. and later by the Edgeworth Arsenal, and will equip a sugar refinery to refine sugar for the Stollwerck Company and allied industries. It is expected that the new refinery will be in operation in about three months and give employment to 100 hands, mostly unskilled labor. It is stated that the moving spirit in the refinery company is H. B. Duane, who bought the Stollwerck Company for the Touraine Company of Boston at public auction, Dec. 23, 1918, when the local factory was sold by the alien property custodian.

DAMAGES FOR COMMERCIAL BRIBERY

The Cleveland Woolen Mills has recovered \$25,000 from the Warren Soap Mfg. Co., of Boston, in a suit involving the question of bribery of employees of the Cleveland company. The company also sued W. H. Durkee, former superintendent, and obtained a judgment for \$16,000, being the amount of commissions received by him. The bribed employees were sentenced to three months in jail and were also heavily fined.

The suits were brought by the Department of Justice. Officers of the Warren Soap Mfg. Co., were indicted on a charge of conspiracy to violate a section of the postal laws prohibiting the use of the mails in furtherance of a scheme to defraud. It was decided by the Court that an arrangement to pay graft is a scheme to defraud the employer.

The Essential Oil Market

Current Spot Quotations of Essential Oils and Aromatic Chemicals, Page 34

ESSENTIAL OIL TRADE BRISK

Oils of Orange, Lemon and Sandalwood Higher—
Advances Made in Methyl Salicylate and U. S. P.
Oil of Lavender Flowers—Oils of Bergamot, Caraway and Coriander Lower

PRICE CHANGES IN NEW YORK

(Stocks in First Hands)

Advanced	
Oil Wintergreen, Artif., 5c lb.	Oil Orange, Sweet Sicilian, 25c lb.
Methyl salicylate (Above)	Sweet West Indian, 50c lb.
Oil Lavender Flowers, 50c lb.	Oil Lemon, 5c lb.
Oil Sandalwood, E. I., 25c lb.	
Declined	
Oil Bergamot, 10c lb.	Oil Coriander, 35 lb.
Oil Caraway, 50c lb.	Coumarin, 25c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Oil Bergamot	\$4.75	\$4.85	\$4.60	\$7.00
Oil Citronella, Ceylon	.65	.65	.60	.51
Oil Cloves	3.90	3.90	3.60	3.25
Oil Lavender Flowers	10.75	10.25	9.25	6.00
Oil Lemon	1.45	1.40	1.20	1.85
Oil Peppermint	8.00	8.00	7.75	5.80
Oil Sandalwood E. I.	10.75	10.50	10.50	13.25
Oil Sassafras, Artif.	.85	.85	.75	.50
Benzaldehyde, U.S.P.	1.50	1.50	1.25	1.60
Coumarin	8.00	8.25	8.00	15.00
Eucalyptol	1.50	1.50	1.40	1.30
Methyl Salicylate	.80	.75	.60	1.00
Vanillin	1.00	1.00	.77	.88
Thymol	12.50	12.50	7.25	13.50
Menthol	12.75	12.75	9.75	7.20

The arrival of inventory time among a great many of the large essential oil consumers has been noticeable here during the past week. Although business has not been exactly slow, the condition is directly reflected in a somewhat reduced volume of orders. Business, however, is exceptionally brisk for this period of the year and is taken as an indication that trading over the coming year will see the greatest expansion which the industry has experienced for many years past. While some consumers stopped buying through the holiday period, others have been continuously active and have not retired from the market at all.

There have been further advances in both West Indian and Sicilian oils of orange this week. Following a stronger movement in primary markets, oil of lemon is higher. A jump in the price of oil of sandalwood is the reflection of advanced production costs in the East Indies. Manufacturers have advanced methyl salicylate. Several houses have raised their prices for U. S. P. oil of lavender flowers. A weaker market in Sicily has sent oil of bergamot quotations lower here. Another sharp reduction has been made in caraway oil. Oil of coriander has been marked down again this week. Oleoresin of malefern is lower. Coumarin is in better supply and easier.

Essential Oils

Oil Anise—Prices are firmly maintained without change from the quotations of last week. Brokers are obtaining stocks at \$1.50 a pound for good-sized lots. Leading essential oil houses quote \$1.60 a pound inside, while some are asking \$1.65 and \$1.70.

Oil of Bay—Oil of bay, while in small supply, has quieted down, and demand is not heavy. The price is steady without change, however, at previously noted levels—\$5.00@\$5.25 a pound. Large quantities of bay rum are moving in the trade at \$3.20 per gallon.

Oil Bergamot—On cabled advices that the market for oil of bergamot is easier in Sicily, dealers here have re-

duced their prices somewhat. Inside quotations name as low as \$4.75 a pound on the spot, while some houses are still asking \$5.00 for their goods. Demand here has not been exceptionally heavy of late.

Oil Cajuput—This item is quiet without change at 85c@90c a pound still ruling for the native. U. S. P. oil is quoted anywhere from \$1.00 up to \$1.25.

Oil Camphor—An arrival of 8,000 cases of Japanese camphor oil from Kobe last week has not affected the price as yet. For white oil, the price here is 27c@28c a pound. Sassafrassy oil is quoted at 12c@14c.

Oil Caraway—A further sharp reduction in the price of oil of caraway has been noted this week. The improvement in supplies from seed at a greatly reduced figure is responsible for the cut. Dealers here now name an inside price of \$4.75 a pound for rectified oil. Up to \$5.00 a pound is being asked in some quarters and slightly higher figures for jobbing lots.

Oil Cassia—Technical oil of cassia is still quoted at any figure between \$2.25 and \$2.45 a pound, according to quality and seller. The \$2.35 price is about representative of the market. For lead-free oil, \$2.45@\$2.55 a pound is still named. U. S. P., rectified is obtainable at \$2.85@\$2.95 a pound.

Oil Cedar Leaf—Supplies of cedar leaf oil are still scarce on the spot, but an improvement of the tight condition of a month or so ago is reported. From \$2.10 up to \$2.40 a pound, according to the dealer, is named for spot goods. About \$2.25 is the general run of prices here. There is a continued scarcity of oil of cedar wood, with little offering at 30c@32c a pound.

Oil Cinnamon—The Ceylon heavy oil is still very scarce at \$28.00 a pound.

Oil Citronella—Good-sized quantities of Ceylon citronella oil are passing into consuming channels at prices noted in the last report. For drums, 65c a pound is quoted, while lesser lots are bringing 66c and up. Java oil is steady and quiet at 95c@\$1.00 a pound.

Oil Cloves—There has been no change in general quotations on this market. Dealers and importers quote \$3.90 a pound for tins. Some brokers give the range of the market at which they can obtain goods as \$3.60@\$3.65. If the statement that there is a considerably larger supply of cloves in primary markets than has been estimated here and that shippers are holding back, is true, the future should see a lower price for oil of cloves. The spot price of the spice is easy.

Oil Coriander—There has been a further reduction in the price of coriander oil on a new offering. The price named here is now \$50 a pound.

Oil Cubebs—Stocks are very meagre on the spot, and prices are firm. Inside seems to be \$9.00 a pound for U. S. P. oil, with holders asking all the way up to \$9.75.

Oil Eucalyptus—There is still very little Australian eucalyptus being offered here. The limited stocks are strongly held at \$1.00 a pound. For jobbing quantities, \$1.05 and higher is asked.

Oil Juniper Berries—The market for oil of juniper berries is quiet with little demand. The range over which prices for spot goods are quoted continues rather wide. Down as low as \$6.00 a pound is heard, while several leading dealers maintain that their price is \$8.00 for rectified oil. The product is in a weak position just now, and future developments are problematical.

Oil Lavender Flowers—The scarcity of stocks here is still in effect, and higher prices are being demanded in some quarters. Inside for genuine U. S. P. oil is apparently \$10.50 a pound, with some holders asking \$11.00 and even up to \$11.50. Spike is strong at \$2.00 a pound.

Oil Lemon—A bullish market in Sicily is reflected in higher spot quotations here for oil of lemon. As high as \$1.60 a pound is named by leading dealers, who give \$1.50 as inside for large quantity orders. Sellers at \$1.45 are reported to have withdrawn the price. The market is very firm and tending upward. Quotations from abroad for forward delivery are noted at an advance.

Oil Orange—Sharp advances in both Sicilian and West Indian sweet oils have been the order of the week. Both are in active demand, and deep inroads have been made into spot stocks. Additional shipments from primary markets are only available at steadily increasing prices. The real effect of the short fruit crop is beginning to be felt in full force. For Sicilian oil, \$5.00@ \$5.25 a pound is quoted, while the West Indian is named at \$4.25@ \$4.50. Bitter is steady but unchanged at \$3.75@ \$4.25 as to seller.

Oil Peppermint—The market for oil of peppermint here is very quiet, with little or nothing doing. A few hand-to-mouth orders for natural oil are reported to have gone through at \$8.25. However, \$8.00 a pound can still be done where there is a buyer. For U. S. P. oil, \$8.50@ \$8.75 a pound is the producers' figure. The lot of several thousand pounds of U. S. P. oil offered at \$8.25 some time ago remains unsold.

Oil Sandalwood—Following a jump in the price by producers in primary markets, dealers here have advanced their quotations for East Indian sandalwood oil. Inside on the spot now seems to be \$10.75, with many holders demanding \$11.00 a pound.

Oil Wintergreen—Artificial is higher at 80c. (See Methyl Salicylate under Aromatic Chemicals.)

Aromatic Chemicals

Coumarin—Owing to a slight improvement in supplies, offerings of coumarin are somewhat freer, and the price is a trifle easier at \$7.75@ \$8.00 a pound.

Menthol—There has been no new development in the menthol situation this week. Reports indicate continued strong markets in both Japan and London, with prices considerably higher than New York. Importations were noted last week of 125 cases from Kobe and Yokohama for the account of strong holders here. Prices are unchanged and difficult to determine, owing to the dearth of buying. The last quotations heard, named \$12.50@ \$12.75 a pound for cases on spot.

Methyl Salicylate—Increased cost of manufacture, in view of the present scarcity and high price of wood alcohol, has caused an advance by manufacturers in the quotations for methyl salicylate this week. Hundred-pound lots are now quoted on a basis of 80c per pound.

Safrol—A recent importation of 60 drums of safrol and 8,000 cases of camphor oil from Kobe may relieve the shortage here with a lower price in the future.

Samples of flavoring extracts, essences and other preparations are being collected in Baltimore and forwarded to the testing laboratory at Washington for examination as to whether they can be used for beverage purposes and are in conflict with the prohibition amendment. The samples are being collected by Elmer A. Forbes, in charge of prohibition at the Internal Revenue Bureau in Baltimore, and sent to Dr. A. B. Adams, head of the testing bureau. One of the things to be established by the tests is whether the preparations contain wood alcohol.

WHY WOOD ALCOHOL IS FATAL

Dr. Reid Hunt, a leading American authority on the effects of alcohol, the head of the Department of Pharmacology of the Medical School of Harvard University, formerly of Johns Hopkins, and for several years chief of the Division of Pharmacology of the United States Health Service, has prepared a bulletin on wood alcohol, at the request of the American Chemical Society.

"Wood alcohol," writes Dr. Hunt, "has become known as the American poison on account of the frequency with which cases of poisoning have been traced to it in the United States. Despite this fact, there is still a lack of appreciation of its dangers and of an understanding of its nature. It cannot be too strongly emphasized that there is not a single property of wood alcohol, except its poisonous effects, by which anyone but a chemist can distinguish between purified wood and ordinary or 'grain' alcohol. The appearance, odor and taste of the two are so strikingly alike that even chemists who have had much experience with them are unable by these properties to distinguish between them with certainty. The difficulty is, of course, greatly increased when essences, flavors or coloring matters are added, as is the case in the spurious drinks now being offered for sale.

"Pharmacologists, moreover, from experiments on dogs, had, years before, shown that the action of wood alcohol upon the animal organism is fundamentally different from that of ordinary alcohol. This difference may be briefly summarized. When ordinary alcohol is taken into the body it is rapidly converted into water and carbonic acid gas which are harmless substances, always present in the body, and any excess of which is promptly eliminated by the kidneys and lungs. Wood alcohol, on the other hand, instead of being changed into harmless substances which are easily eliminated remains in the body as such for a considerable time and is then slowly converted into another poison—formic acid—the acid which is found in ants. These poisons and perhaps a third formed from the wood alcohol, formaldehyde, attack the brain and other organs and cause death or blindness.

"Poisonousness is an inherent quality of wood alcohol," continued Dr. Hunt. "It is as impossible to prepare non-poisonous wood alcohol as it is to prepare non-poisonous prussic acid.

"Individuals vary considerably in their susceptibility to wood alcohol; some die or become blind from amounts which seem to do no harm to others. This is true, however, of all poisons. Death or blindness has resulted from two teaspoonfuls and from one or two tablespoonfuls of the poison. Sixty to seventy-five per cent of those taking four ounces, that is a quarter of a pint or half a 'glassful,' have died or become permanently blind."

The will of Charles A. Webb, of A. L. Webb & Sons, Inc., Baltimore, who died Dec. 20, was filed for probate in the Orphans' Court of Baltimore Dec. 31. It leaves the entire estate in trust for the widow, who is to get the income for life. Upon her death the income is to be paid to the children of Mr. Webb, and upon their death the principal is to be divided among the descendants. Mrs. Webb bonded in the sum of \$500,000, and the Mercantile Trust and Deposit Company, the trustee, for \$750,000.

Lord Leverhulme, head of the Port Sunlight Soap Works, of England, and whose plant at Cambridge, Mass., is conducted under the name of Lever Brothers Co., is paying the San Francisco office of the firm a visit.

The Heavy Chemical Market

Current Spot Quotations of Heavy Chemicals, Pages 34 and 35

CONTRACT PRICES ON HEAVY CHEMICALS

Deliveries During 1920 Bring Good Rates—Spot Market Bare of Many Materials—Strong Demand for Sulphuric Acid—Less Activity in Caustic Soda and Ammonium Sulphate

PRICE CHANGES IN NEW YORK

(Stocks in First Hands)

Advanced

Aluminum Hydrate, 2c lb. Salt Cake, \$2 ton

Declined

Potassium Chlorate, 3c lb. Sodium Bichromate, 3c lb.
Sodium Chlorate, 2c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Acetic Acid, Glacial.....lb.	\$1.12 3/4	\$1.12 3/4	\$1.12 3/4	\$1.19 1/4
Sulphuric Acid, 66 deg.....ton	22.00	22.00	18.00	28.00
Bleaching Powder.....100 lbs.	2.75	2.25	2.50	2.75
Copper Sulphate.....100 lbs.	8.00	8.00	8.25	9.50
Potash, Caustic.....lb.	.30	.30	.32	.74
Salt peter, gran.....lb.	.14	.14	.33 1/4	.27
Soda Ash, 33 p.c.....100 lbs.	2.00	2.00	2.00	2.60
Caustic Soda, 76 p.c.....100 lbs.	4.20	4.20	3.30	4.30
Potassium Bichromate.....lb.	.27	.27	.26	.45

Trading in heavy chemicals fell off slightly. Inquiries continue to come forward in good volume from both domestic and export buyers, but holders are not in a position to quote. Many of the products which have been in big demand from the Orient for some time are now quoted at levels which are not inviting to buyers. Prices have showed signs of weakening, especially on ammonium sulphate. Offerings of odd lots of caustic soda have been made freely, but buyers were few for early January shipment even at attractive figures. Alums have eased off slightly, being in lighter demand.

The majority of ammonium products are still off the market or confined to limited lots. Price revisions were of little importance. Foreign competition on chlorate of soda and potash has forced American producers to make concessions. Salt cake and nitre cake have been active and advances were noted on salt cake, with offerings very light. Sodium bichromate is lower. Copper sulphate has stiffened slightly and holders look for an advance shortly. The acid market is unchanged, supplies being plentiful on all acids, with the exception of sulphuric.

Acid, Acetic—11 1/2c per pound is the price of glacial on the spot market. Certain makers are asking 14c on new business for 1920. The demand continues steady, with supplies offered freely. 9 1/4@9 1/2c is quoted for 80 p.c. pure; 8 1/2c@8 3/4c for the redistilled, and 8c for the commercial, containers inclusive. The other percentages are quoted on the basis of \$3.75 for the 28 p.c.

Acid, Muriatic—Heavy buying continues, but has very little effect upon prices as supplies are offered quite freely. About \$1.50 is quoted on the 20-degree acid in tank-car lots, sellers' works. Carboys are held at \$1.65@1.75 per hundred pounds, depending upon the holder. The 18-degree is 1/4c lower, and the 22-degree 1/4c higher per pound.

Acid, Nitric—Buying is steady and prices show strength at 5c@5 1/4c for the 36-degree; 6 1/4c@6 1/2c for the 38-degree; 6 3/4c@7c for the 40-degree; and 7 1/2c@7 3/4c per pound for the 42-degree acid in carboys.

Acid, Sulphuric—Sellers are asking \$22 per ton for tank-car lots at works for the 66-degree acid. However,

contracts continue to be closed at \$20 and this figure appears to be about the market price. Spot goods in the hands of jobbers are held at \$25, but very little material is available except on contract business. Contract at \$14 is possible on the 60-degree acid, with small lots bringing from \$15@16, depending upon quantity. Oleum is strong at \$23@25 per ton on large contracts at sellers' works. The demand appears to be centered on the 66-degree acid.

Alums—The demand eased up slightly during the interval, without weakening the price, probably due to the stringency of supplies, especially on the ammonium grades. Production is still being sold heavily on contract, and the goods on the open market are confined to odd lots: This is especially true of powdered ammonium. Lump is quoted at 4c@4 1/4c per pound; powdered 4 1/2@4 3/4c per pound, and ground, which is in least demand, 4 1/4c@4 1/2c per pound. Chrome ammonium is unchanged at 15c, but production is sold ahead. U. S. P. potash lump is firm at 8c in most quarters.

Aluminum Sulphate—Inquiries are heavy, but are mostly "rainbows" according to reports. Supplies are not plentiful, and quotations are firm at \$1.75 for the commercial, and \$2.75 for the iron-free material.

Aluminum Hydrate—Prices are slightly higher, at 18c for the light, and 9 1/2c per pound for the heavy.

Ammonia Water—Supplies are off the market, and are under very heavy request. The 26-degree is quoted at 8 3/4c in large-lot business. Carboys are held at 10 3/4c per pound.

Ammonium Sulphate—The Japanese have temporarily dropped out of the market, and prices have eased off slightly. Very little spot action was reported and holders were naming \$7.05@7.10 per hundred pounds f.a.s. New York.

Ammonium Muriate—White granular continues in strong request and is firm at 15c@16c per pound, with figures 1/2c higher in some directions. Lump in casks can be obtained at 23c@24c and about 25c for jobbing quantities. Grey material remains at 12 1/2c per pound.

Arsenic—Spot white arsenic is being held at 10 1/4@11c per pound. Trading is restricted owing to the small supplies. Production continues heavy on contract. Red is quiet and fairly firm at 22c per pound.

Barium Chloride—The stringency is still felt on both the domestic and imported products, which are held at a figure close to \$100 a ton. Requirements are large, with business curtailed, because of scarcity.

Bleaching Powder—There is practically nothing available for spot or near-by delivery. Manufacturers are not quoting on early January business and many are sold ahead over the first few months of the year. The domestic price is \$2.50@3.00 per hundred pounds, sellers' works. The export price is nominal at \$3.35 f. a. s.

Copper Sulphate—Fearing advances on the sulphate, following recent advances on the metal, consumers have been rather active. Owing to the recent increase in the price of the metal, a slight advance on the sulphate market in the near future is possible. Car-lots of the 99 p.c. large crystals are still held at \$8@8.50 per hundred pounds, with second hands quoting a shade under this figure.

Calcium—Offerings for spot delivery have been made at 4½¢ per pound. The export inquiry is active, but domestic business is steady on contract.

Copperas—The market continues firm on contract, with slightly lower levels heard on spot goods. From \$1.10@1.20 per hundred pounds f.o.b. works, is named by the producers.

Lead Acetate—Contract business continues to absorb most of the supply. The market is strong and prices are holding firm at 14¢ for the white crystals.

Potash, Caustic—Prices are very stiff at 28¢@32¢ per pound, owing to the heavy demand and scarcity of crude materials. Offerings are light, with most producers tied-up on futures.

Potassium Bichromate—Spot goods in small quantities are held at 27¢ in quarters. However, higher prices are being asked.

Potassium Chlorate—Foreign competition has forced the price down to 15¢ per pound on both the powdered and crystals.

Potassium Permanganate—Stocks are still scarce and under strong call for export at 68¢@70¢ per pound.

Potassium Prussiate—Arrival of imported stocks has slightly eased up the price, which is now 33¢ per pound. The demand is quiet. Red is steady at 95¢@1.00 per pound.

Soda Ash—The export price is still \$1.90 less five per cent f.a.s., with offerings very light for prompt shipment. The domestic market is active and decidedly firm on contract at \$1.62½, basis 48 p.c., works.

Soda, Caustic—Offerings on odd lots for early January shipment from works have been made at \$4.15@4.25 per hundred pounds f.a.s. this port, depending upon the "Make." Manufacturers are sold-up and are quoting domestic business at \$3.00@3.20 per hundred pounds, basis 60, sellers' works.

Sodium Bichromate—The price has dropped to about 19¢ per pound. Very little action is reported on the spot market, buyers anticipating a further decline.

Sodium Prussiate—Sales of 5@10-ton lots were reported at 26½¢ per pound. The available stocks on the open market are light with offerings close to 26¢ per pound.

Sodium Chlorate—Producers have lowered the price to 10¢ per pound. Probably the decline is due to the fear of foreign competition.

Salt Cake—Sales were put through during the week at \$15 a ton sellers' works. Very little material is being offered. At the close the quotation was \$17.

Nitre Cake—Supplies are depleted and holders are asking fancy prices. However, a few hundred tons are still available over the first six months at \$4.50 per ton.

CHEMICAL SOCIETY ELECTS OFFICERS

New officers of the New York Section of the American Chemical Society elected at the December meeting are:

Chairman, Ralph H. McKee; vice-chairman, John E. Teeple; secretary and treasurer, Herbert G. Sidebottom. Executive Committee—D. W. Jayne, C. H. Herty, F. J. Metzger, K. G. MacKenzie.

Councillors—Elwood Hendrick, R. H. McKee, D. W. Jayne, A. C. Langmuir, W. P. Cohoe, J. M. Matthews, David Wesson, H. C. Sherman, J. C. Olsen, G. W. Thompson, Charles Baskerville, T. L. Briggs, H. E. Hill, J. M. Nelson, F. E. Dodge, K. C. MacKenzie, R. P. Calvert, L. H. Cone, J. R. M. Klotz, F. J. Metzger, H. R. Moody.

Industrial Chemical Notes

The H. H. Rosenthal Co., New York, dealers in chemicals, drugs and oils, have engaged the services of William C. Neubeck, formerly with Thos. M. Curtius.

The William H. Nichols Medal has been awarded to Dr. Irving Langmuir for an article on "The Arrangement of Electrons in Atoms and Molecules."

Brile and Ratner, Inc., have opened offices at 115 Broadway, to deal in metals and chemicals. Mr. Brile is a specialist in metals and Mr. Ratner in chemicals.

E. C. McKelvy, of the Bureau of Standards, Washington, was severely burned by an explosion while working on an apparatus to determine the freezing point of ammonia, and died in a hospital shortly afterward.

The first cargo brought to Boston from Germany in more than five years arrived when the steamer West Harlan, Captain Smelenberg, reached there from Hamburg, with 5,000 tons of potash in bags and in bulk to be used in fertilizer.

Secretary of War Baker told the House Committee investigating war expenditures that the Government can dispose of its hydro-electric site at Mussel Shoals, Ala., along with its nitrate plant, at any time it sees fit, to the American Cyanamid Co. Mr. Baker was quizzed at length as to the Mussel Shoals project, which he declared was the best hydro-electric site he knew of in this country.

The officers and directors of the American Cyanamid Company are defendants in two suits filed at White Plains by Charles H. Baker, a large stockholder and one of the organizers of the company, which have as their object the forcing of a return of moneys paid out to officers and managers of the company as bonuses in the last two years and a distribution of some of the large earnings to the common stockholders.

The National Oxygen and Machine Co.'s plant at Detroit, Mich., is practically completed. The Detroit plant is the largest of a chain of plants owned and operated by this company throughout the United States, in which is manufactured oxygen and hydrogen by the electrolytic decomposition of distilled water. Other plants of the company are located in Chicago, New York, Erie, Pa., Hartford, Conn., Harrison, N. J., and Muskegon.

Charles A. Anderson & Co., New York, say of the chemical markets: "The holiday spirit showed its effect upon the chemical market early in the week, and trading remained stagnant for the most part. One feature, however, was the advance in the price of formaldehyde, which closed at 35 to 36¢ per pound. Caustic soda remains in active demand; limited supplies and the sold-up condition of producers has strengthened this item materially."

The explosion of 75,000 pounds of powder at the Hagley Point plant of the du Pont Powder Co., near Wilmington, Del., shook buildings for many miles, and killed five employees. The first shock was at 8.55 a.m., Jan. 2, and was light, but the second, which followed a few seconds later, was felt in West Philadelphia, 30 miles from the scene and many windows were broken. The village of Henry Clay, about one-quarter of a mile from the yard, suffered heavily.

The Color and Dyestuff Market

Current Spot Quotations of Colors, Dyestuffs, etc., Pages 36 and 48

STRINGENCY IN INTERMEDIATES

Production Sold Far Ahead for Domestic Use, and
Exporters Await Opportunity to Buy for Shipment
Abroad—Aniline Derivatives Extremely Scarce

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced	Declined
Betanaphthol, Spot, 5c lb.	Logwood, Sticks, \$10 ton
Hematin, 2c lb.	Logwood, Extracts, 2c lb.

No Declines

Trend of the Market

	Today	Last Week	Last Month	Last Year
*Benzol, C. P. gal.	.27	.27	.25	.24
Naphthalene, flake lb.	.07	.07	.06	.09
Phenol lb.	.12	.12	.12	.14
Xylol, pure gal.	.40	.40	.40	.45
*Toluol, pure gal.	.28	.28	.26	1.50
Aniline Oil lb.	.32	.32	.30	.22
Benzaldehyde lb.	.65	.65	.65	.73
Betanaphthol, dist. lb.	.55	.50	.50	.65
Paranitraniline lb.	1.15	1.15	1.00	1.70
*Toluidine lb.	.25	.25	.25	1.00
*Nominal				

Although new producers are entering the field to make intermediates, and many of the large manufacturers intend to increase their production, the present stringency is expected to last well into 1920, if not over the entire year. Consuming requirements continue to broaden, and as production is largely sold ahead on many of the important dye bases, no drop in prices can be expected. Furthermore, exporters are anxiously awaiting the opportunity of buying various intermediates, so that any surplus will, without doubt, find a ready outlet through foreign channels. With the increasing costs of labor and raw materials, prices on many items are likely to be higher during the early part of the present year, but will in all probability drop slightly about the middle of the year.

Aniline derivatives and many of the acids are still extremely scarce and under heavy request. Aniline oil is slightly easier in supply for the time being, but gives no indication of receding in price.

The crudes are unchanged. Benzol is still in strong request, with few buyers. Toluol on the open market is high, depending upon the seller, lots available for prompt shipment being scattered.

Hematin and logwood are the two strong features of the extract market. Both are higher, following heavy buying and increasing cost of the wood. Tanning materials are quiet. Annatto has fallen in price, owing to the heavy accumulation of stocks.

The color market closed the year under conditions satisfactory to producers, but considerable anxiety is manifested over the outcome of the licensing plan. Domestic color manufacturers are tied up over a part of 1920 on many of the important colors, which are off the spot market at the present time. The coming year should prove to be the banner year for the industry, providing the protection needed is granted promptly.

Intermediates

Acid, H—The price is nominal at \$1.75@\$2.00 per pound. Holders are not offering spot or near-by material, and producers are under heavy contract until well into the spring.

Acid, Sulphanilic—Spot lots aggregating twenty-five or thirty tons of the refined acid were offered during the week at 30c per pound. About 37c is the price for spot goods and 25c on contract.

Aniline Oil—Supplies are slightly easier, probably due to the expiration of contracts on the first of the year. The market, as a whole, is tied up on futures, and manufacturers are holding prices firm. Very little action is reported on the open market, the supplies being controlled by first hands. Quotations are 33c@35c per pound.

Aniline Salt—Firm bids at 42c@43c per pound on ton lots for January delivery were turned down during the week because of the inability to obtain the product.

Anthraquinone—About \$4.00 a pound is quoted on the 98 p. c. product, but some holders are asking up to \$6.

Alphanaphthylamine—The spot market is without offerings, and production is largely sold ahead on contract. Quotations are firm at 35c per pound for domestic delivery.

Betanaphthol—Supplies for spot or near-by shipment are still stringent. Spot goods are confined to one or two-ton lots, which are held at 55c ex-warehouse. The demand is heavy on contract at about 44c per pound.

Benzidine—Base material is selling around \$1.20@ \$1.30 per pound. The demand is keen, and supplies are light for prompt shipment, with most producers under contract. The sulphate is quiet at \$1.00 as the inside figure.

Diethylaniline—Very little action is reported, with supplies in good quantity at \$1.35 per pound.

Dimethylaniline—The open market is practically bare and under heavy inquiry for January delivery. Sales have passed at 85c, but 90c per pound is asked in quarters. Manufacturers are tied up on futures, with some naming 65c for April delivery.

Monoethylaniline—Offerings are limited, and holders are asking around \$2.15 per pound.

Paranitraniline—One odd lot aggregating about 150 tons was sold during the week at 90c per pound. Prices are firm at \$1.15, with offerings limited on the open market for spot or prompt shipment.

Phthalic Anhydride—The demand is steady, with offerings plentiful around 75c@90c per pound.

Orthotoluidine—Consumers have been active, and deep inroads have been made into supplies. The market is firmer, and prices show strength at 25c per pound.

Paratoluidine—Holders of small supplies are asking from \$2.00@\$2.25 per pound. Contracts are being made at about \$1.75.

Coal-Tar Crudes

Benzol—First hands continue in control of the market. The spot market is bare. The 100 p. c. material in tank cars is held at 27c per gallon. In drums, it is quoted up to 32c. The 90 p. c. benzol is 1c lower in tanks and drums.

Cresylic Acid—Very light stocks are reported. Demands are heavy, and quotations are firm at 75c@80c for the 95-97 p. c.; 60c for the 50 p. c., and 40c per gallon for the 25 p. c.

Naphthalene—Although production is largely sold ahead on prime flakes and prices are strong at 7c per pound, one lot was closed during the week at 6c. Offerings are limited. Ball material is steady at 8½c@9½c per pound.

Phenol—Bids on 20-ton lots for export at 19c per pound were turned down during the week. Inquiries were heavy for foreign shipment, with sellers asking 20c f. a. s. this port. Very little material is available for export. Domestic prices are unchanged at 12c@17c per pound.

Toluol—Available supplies for prompt shipment are scattered. Production is still light, and consuming demands are sufficient to absorb the quantities that are reaching the open market. Five and ten-drum lots were obtainable at the close at 33c. The contract price is holding at 28c for tank cars and up to 32c for drum lots.

Dye Bases and Dyewoods

Annatto—Offerings at 3½c have been made. The market is very weak, with no buyers.

Archil—The double is higher, being under heavy buying at 20c@25c per pound. The market is still in short supply, and triple is held at 19c@20c, and concentrated at 20c@26c per pound.

Cochineal—Sales have fallen off, and the market is quiet. Quotations are 60c@62c for the grey black; 65c for the rosy black, and 67c for the silver.

Cutch—Trading is light at 16c@18c for the Rangoon; 12c@14c for the liquid, and 14c@15c for the tablet.

Cudbear—The demand and supply are fair at 22c per pound.

Fustic—Sticks are held at \$30@\$35 per ton, probably owing to the high freight rates from primary points, as the demand for the extract is very light. Solid extract is quoted at 22c@27c per pound; crystals of high grade at 30c@40c; 42-degree extract at 14c@16½c, and 51-degree liquid at 15c@19c per pound.

Hematine—Prices are nominal and higher at 16c@17c per pound for the 51-degree extract and 35c@40c for the 100 p. c. crystals.

Logwood—Sticks are higher, being quoted at \$50@\$60 a ton delivered. Shipments from primary points are light, following lack of shipping space and difficulty in obtaining the wood, which is held at \$38 at point of shipment. Sellers of the extract have advanced the price, now asking 25c for the solid; 30c for the crystals, and 16c@18c for the 51-degree twaddle.

Quercitron—Advances are reported on both types, which are in good demand at 7½c@8½c for the 51-degree and 14c@18c for the solid.

WOULD PROTECT DYE INDUSTRY

At the meeting of the American Institute of Chemical Engineers at Savannah, Ga., the following resolution was unanimously adopted:

"The American Institute of Chemical Engineers in convention assembled at Savannah, Ga., recognizing the importance of protecting the coal-tar industry and the dye industry in particular, not only to the industrial interests of the country in general, but also to its public health and the protection of the country in time of war, wishes to express itself in the following resolution:

"That the American Institute of Chemical Engineers urges upon the United States Senate the importance of enacting the Longworth bill embodying the licensing plan protecting both the manufacturer and user of dyes."

Dyestuff Notes

The Commonwealth Color & Chemical Co., Brooklyn, N. Y., has prepared a color card showing the principal acid colors they manufacture.

Jacob Widder, treasurer of the Widder Dye & Chemical Co., Brooklyn, N. Y., sailed for Europe on the Mauretania on December 30. He expects to be gone about two months.

Leo Schwalb, of Cleveland, Ohio, has bought a factory in Newark, N. J., for the manufacture of dyes and chemicals. Abraham Jacobson, a chemical engineer, is to manage the plant.

The arrangement by which Aniline Dyes and Chemicals, Inc., New York, has had the exclusive sale of the aniline colors and intermediates manufactured by the Ault & Wiborg Co. expired by mutual consent on Dec. 31.

Notice of organization has been filed by the Regal Color & Chemical Co., Providence, R. I., to operate at 357 Westminster street, for the production of chemicals, colors, etc. James C. Carmack, 124 Winter street, Woonsocket, heads the company.

The National Aniline and Chemical Co., Inc., announces the production of a new basic yellow known as Phosphine G N. This color possesses excellent levelling properties and will find extensive use in dyeing leather. It forms a part of many basic mixtures for browns and tans on leather.

E. I. du Pont de Nemours & Co. have filed with the Federal Trade Commission a denial of the charges of unfair methods of competition and the use of "tying" contracts. The company denies that it has adopted the practice of giving gratuities to miners as an inducement to influence them to refuse to use competitors' powder. The company also specifically denies the allegation that it fomented strikes in mines where its powder was not used.

New trade names have arisen for vat dyes in England, now that several domestic companies are manufacturing them, according to advice from an American dyestuff man who recently returned from a trip to that country. The vat dyes of British Dyes, Ltd., are called Chloranthrene colors; those of Levinstein, Ltd., are called Duranthrene colors; those of L. B. Holliday & Co. are called Hydranthrene colors; while Scottish Dyes, Ltd., has affixed the name of Caledon to their products.

Manchester, Eng., advices dated December 13 say of tar products: "Carbolic acid is not very firm and the price quoted is 2s 3d to 2s 4d per gallon for crude 60s naked on rails. It is reported that much higher prices than this have been offered in some cases. Crystal is now very much stronger and makers are unable to sell for delivery much before March. The prices seem to vary from 9d to 10d per pound. It is said that the Government has sold the whole of its stock of depreciated crystal to a firm of merchants at 5½d per pound. The danger of the market, however, lies in the fact that but for the Japanese demand there would be no sufficient outlet, and if this demand should suddenly cease the market might collapse with dramatic suddenness. Creosote is very firm at about 6½d to 6¾d per gallon and more for suitable fuel qualities. Benzol is in a doubtful position, as prices for crude remain very high and it does not pay to refine.

The Oil Market

Current Spot Quotations of Oils, Page 38; Tallow, Greases, etc., Page 39

VEGETABLE OILS GETTING SCARCE

Prices Going Up on the Pacific Coast and in the Far East—Linseed Oil Unchanged, With Trading Light, Owing to the Weak Market for Domestic and Argentine Seed

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced
Cottonseed Oil, Summer Yellow, Soya Bean Oil, Tanks, Coast, 1c
½c lb.
Declined
No Declines

Trend of the Market

	Today	Last Week	Last Month	Last Year
Cod Oil, N. F.	\$1.14	\$1.14	\$1.15	\$1.55
Degras, Amer. bbls.	.07	.07	.07½	.24
Lard, No. 1	1.43	1.33	1.35	1.50
Menhaden, South, crd.	.95	.85	.85	1.20
Neatsfoot, 20 deg. cold	2.25	2.25	2.25	3.19
Red Oil, Crude	.16	.16	.17	.17½
Stearic Acid, T. P.	.30	.30	.30	.25
Coconut, Ceylon, dom. bbls.	.19½	.19½	.17½	.17½
Cottonseed, crude, tanks	.19½	.19½	.19½	.17½
Linseed cars, bbls.	1.87	1.87	1.72	1.87
Olive, denatured	2.50	2.50	2.50	4.25
Peanut, refined	.27	.27	.27	.22½
Soya Bean, bbls.	.18½	.18½	.18	.18
*F. O. B. Mills				

Holders of vegetable oils are disinclined to make offerings, owing to the high prices on the Coast and in the Far East, and the fact that many of the oils are extremely scarce for prompt delivery. Linseed remains unchanged, with trading light, in anticipation of a decline, owing to the weak market for domestic and Argentine seed. Animal oils are quiet, with slight advances reported, following the stronger position of tallow. Many of the oils are scarce. Fish oils are very quiet, with prices unchanged from those of last report.

Linseed Oil—The market closed very inactive. Not a great deal of buying is expected until about the middle of January. The recent weakening of the market for domestic and Argentine seed is expected to delay the advance that was expected. Present prices are firm at \$1.77 per gallon for January-March in car lots; \$1.72 for April, and \$1.62 for May-September. At Duluth, flaxseed was held at \$4.68 and May at \$4.50, with July at \$4.47. At Winnipeg, cash seed was quoted at \$4.78, with May at \$4.83 and July at \$4.80. Buenos Aires closed at \$2.37½.

Cottonseed Oil—Prices are unchanged, except for summer prime, which is higher. Buyers are out of the market, and trading during the week was at a minimum. Stocks are still in fair supply for spot or nearby shipment at 19½c@20c in tanks f. o. b. mills; 21c@22c for the prime yellow in barrels, and 23¼c@25c per pound for the winter yellow.

Coconut Oil—Supplies are light and under heavy inquiry. Offerings are limited. Bids at 19c for crude Manila were turned down, as holders refuse to sell under 19½c. Twenty thousand cases of Cochin were opened to bids during the week, and the lot was reported as closed out at a figure around 20c. Refined Manila in barrels was offered at 21½c@22c spot New York. Domestic Ceylon in barrels is held in most directions at 19½c@19¾c, with tanks at 19c@19¼c. Cochin is quoted at 20c@20½c in barrels and 19¼c@

20c in tanks. Manila on the Coast in tanks is held at 18½c@18¾c per pound. The market closed very firm.

China Wood Oil—There is a fairly good inquiry, and sales for January, February and March were reported. The market is firm at the recent advance to 23¼c@24c per pound on spot goods in barrel lots.

Castor Oil—Prices have failed to strengthen, owing to the heavy supply of raw materials and lack of buyers. Twenty cents is named as the inside figure on No. 1 in barrels and 21c per pound for cases.

Corn Oil—Refined is held at 23½c in barrels, with crude in tanks at 19c. Supplies are limited, as is the demand at the present time, with shading possible.

Olive Oil—Quotations are firm at unchanged levels of \$2.50@2.60 a gallon for the denatured; \$3.10@3.20 for the edible, and 19¼c@19½c per pound for foots. Trading was very quiet during the week. Stocks are in fair supply.

Peanut Oil—The oil is in light supply on spot and is under good inquiry. Holders advanced the price of the refined oil to 28c per pound, as the inside figure; 23c@24c is still named on domestic crude at the mill, and 23c@23½c per pound for Oriental in tanks on the Coast.

Palm Oil—Genuine Lagos can be obtained at 16¾c@17c, with Niger at 15¾c@16½c. Supplies of Lagos are only fair, but stocks of Niger are heavy. Benin is nominal at 17c per pound.

Sesame Oil—Domestic edible is quoted nominally at \$2.50 per gallon. Stocks are depleted.

Soya Bean Oil—Crude soya bean oil on the Coast is decidedly strong, being held at 17c, as the inside figure, with 17½c named on January and 17¼c on February-March shipments. Spot goods in barrels are very strong at 18¼c@18½c per pound.

Animal Oils

Lard Oils—Following the recent advance in the price of tallow, holders of lard oil are now naming higher prices. The demand has been active of late. Quotations are \$1.85 for prime winter strained; \$1.75 for off prime; \$1.50 for extra No. 1; \$1.43 for No. 1, and \$1.39 for No. 2 per gallon.

Neats-foot Oil—Prices are unchanged at \$2.25 for the 20-degree; \$2.05 for the 39-degree cold test; \$1.90 for the 40-degree cold test; \$1.60 for the dark, and \$1.75 per gallon for the prime.

Degras Oil—Consuming requirements are still light, with quotations at 7c@7¼c for the American; 7½c@8½c for the English, and 14c@18c per pound for the neutral.

Red Oil—Prices are firm at 16c@16½c.

Fish Oils

Cod Oil—Buying is limited, with prices holding at \$1.12@1.14 for the Newfoundland oil; \$1.10@1.12 for domestic prime by the gallon, and \$108.00 for Norwegian in barrel lots.

Menhaden—Crude menhaden is still held at 90c@\$1.05 f. o. b. Baltimore. Light strained is quiet at \$1.18 per gallon; yellow bleached at \$1.20 per gallon, and white winter bleached at \$1.22 per pound. Very little action is reported.

Sperm Oil—Offerings were made on the spot market at \$1.80 per gallon for the 38-degree. The market is quiet, with few buyers.

GERMANY'S CONSUMPTION OF OILS

Various estimates have been given of Germany's pre-war consumption of oils and fats; the latest is 1,900,000 tons, and as this is the estimate of Dr. Fahrion—a noted authority on the subject and editor of the principal German journal dealing with oils, fats, soaps, etc., says the "London Economist," it may be taken as fairly trustworthy. Dr. Fahrion says that this grand total is made up of 600,000 tons of vegetable oils and fats and 1,300,000 tons animal fats; and, again, 1,500,000 tons was used for food and 400,000 tons for industrial purposes.

With the exception of 200,000 tons, mostly imported from America, the animal fats were supplied by 21,000,000 head of cattle (sheep presumably included) and 25,000,000 pigs, yielding 500,000 tons of lard, 200,000 tons tallow (beef and mutton) and 400,000 tons butter. Of the vegetable oils only about 20,000 tons were obtained from home-grown oilseeds. A certain amount of vegetable oils was imported, but, broadly speaking, it may be said that the whole of the balance of 580,000 tons was milled in Germany from imported oilseeds and nuts. A considerable amount of vegetable oil was, of course, exported.

The German linoleum, stearin, soap, and candle industries were on a considerable scale before the war. About 400,000 tons of linseed were imported, mostly from Argentina, and 25,000 tons of linseed oil were used for linoleum manufacture. Just lately there has been much talk about linseed oil substitutes in the German technical journals, especially for making linoleum and for varnish manufacture. Fahrion, however, is of opinion that these attempts to find a substitute have not been successful, either in Germany or in England, where it was hoped that the linseed-oil fatty acids, produced in the "splitting" of linseed oil for glycerin manufacture, could have been used for linoleum manufacture.

Of the 400,000 tons of fat which, before the war, were used for industrial or nonedible purposes, about 250,000 tons were used for soap making and 6,000 to 8,000 tons for candles. The concentration of the industry in the hands of a few large firms has not proceeded so rapidly in Germany as in England. At the outbreak of war there were 34 large, 85 medium, and 549 small soap works, with a total capital of about 300,000,000 marks. During the war the fat available for soap making was reduced to 18,000 tons per annum, and most of the works had to close. In 1917 the whole industry was brought under the control of one syndicate; it was, in fact, one of the earliest examples of compulsory syndication. The future is uncertain, although it is expected that syndication will reduce the costs of manufacture and of distribution.

Liverpool advices dated December 13 say of oils: "Coconut oil is quiet but steady, Ceylon 101s to 102s and Ceylon 99s per cwt. Palm kernel is slow; Liverpool crude 92s per cwt. net naked. Lard oil is quite but steady; English refined 140s for choice down to 110s for low qualities and American extra winter strained 130s per cwt. in barrels. Castor oil is steady; English pharmacy 101s, firsts 98s, and seconds 96s per cwt. in barrels. Rape oil is quiet but steady; Liverpool refined 111s per cwt. in barrels.

A London report dated Dec. 12 says of rape oil: "Very steady markets were witnessed without quotable price changes. Refined in London being still quoted £110 per ton and crude £105. In Hull, however, crushed spot improved £2 and extracted spot £3 10s, the respective prices being £105 crushed and £102 extracted."

INDIA'S CASTOR OIL INDUSTRY

Government Is Encouraging Planters to Produce Larger Crops—More Than 100,000 Tons of Seeds and a Million Gallons of Oil Formerly Exported Annually

In an effort to encourage the production of the castor plant in India, the Government is circulating facts regarding the uses of the bean and the oil. India's average exports of castor seeds in the five years immediately preceding the war were 113,600 tons a year and exports of the castor oil amounted in previous years to over a million gallons. In 1916-17, exports amounted to 1,723,000 gallons valued at 2,612,000 rupees (a rupee is about 32½ cents American currency). In the same year, India exported castor seed amounting to 1,849,000 cwt. and valued at 14,358,000 rupees.

A list of uses for castor oil is given in the "Scientific American" of a recent date and is being copied in Indian publications including "Commerce and Industries" which is explaining to plantation owners the advantages and profits in castor bean cultivation. This publication says:

All this means higher prices and greater profits for those who take to its cultivation. Seeing that it is possible for us to beat down other countries in the markets for castor and looking at the increasing demand for the oil in the future, it is surely worth our while to find out if it would not pay if we bring more waste land under castor.

The greater is the need for such an enquiry as the other uses of castor than that as a lubricant are numerous. There is, in the first place, its use in the various departments of pharmacy. It is a pity that we still import a certain quantity of castor oil for medicinal purposes from the European countries, although in the past few years these imports are being steadily replaced by Indian manufactured oil. But there are other uses for castor oil. It is used to a large extent in the manufacture of substitute or artificial leather, which takes the place of natural leather in upholstery. Secondly, castor oil is an essential component in some artificial rubbers and there are various kinds of celluloid which depend upon this product of the castor bean. Further, it furnishes a very satisfactory coloring for butter; and from it is produced the so-called Turkey-red oil, which is an important factor in the dyeing of textiles and in the treatment of the fabrics. Fifthly, it is largely used in the making of transparent soaps. Again, castor oil yields acids such as sebacic acid which is superior to stearic acid in the manufacture of candles and from it is also obtained caprylic acid which lends itself to the composition of varnishes peculiarly suited to the polishing of all kinds of high-class furniture, carriage bodies, and paintings, and is extensively employed in the preparation of tracing cloth. Castor oil is also used in making waterproof preparations.

The Los Angeles Soap Co., Los Angeles, Cal., is having plans prepared for several reinforced concrete factory buildings.

Imports at San Francisco during the week ending Dec. 27, included the following: On the San Juan from Cristobal, to the Pacific Mail S. S. Co., 106 packages of indigo and 51 packages of henequin; on the Standard Oil steamer Derbyline from Cebu, P. I., 9,700 tons of coconut oil; on the West Cactus to Struthers & Dixon, from Manila, 1,000 bags of sulphur; from Yokohama, 6 packages of antimony; from Hongkong, 5,000 cases of bean oil, 100 packages of wax, 1,330 sacks of bean cake and 220 bags of alum; from Shanghai, 25 cases of camphor, and from Keelung, 86 barrels of peanut oil.

The Foreign Markets

Imports of Drugs, Chemicals, Dyestuffs, etc., Pages 39 and 40

LONDON DRUG MARKET ACTIVE

Shellac, Balsam Peru, Rubber and Lead Products Are Higher—Cream of Tartar Firmer—Tartaric Acid Easier—Menthol Takes a Sudden Drop—Export Business Expanding

(Special Cable to Drug & Chemical Markets)

London, Jan. 6.—The markets for chemicals and drugs opened the New Year with a good volume of business and prices well maintained. There is an increasing demand for American specialties for export, and trade with the Continent is rapidly expanding. Many products are higher, but menthol has taken a sudden drop.

Quotations have been advanced on shellac, rubber, all lead products and balsam Peru.

There is a firmer tone in the market on cream tartar. Tartaric acid is easier. Menthol is lower.

London, Dec. 20 (By Mail).—A very important factor, which will have to be considered more seriously by our manufacturers in the coming year is the enormous advance in coals, wages, intermediates and general charges for docks, transportation and packing, all of which are increasing daily, and are not yet fully allowed for in many existing quotations.

The further appreciation of the United States dollar has been followed by a general upward movement in all United States products on the spot, and a tendency to curtail fresh imports.

Bromides are higher, but second hand holders are still willing sellers below New York recently advanced parity prices.

There is doubtless still some anxiety felt as to future shipments from Germany. The soda and ammonia salts are not, however, coming in from that quarter, and are proportionately higher than potash, which is being imported in fairly moderate quantities. Prices by second hands are: Potash, granulated, 4s 3d per lb.; crystals, 4s 6d per lb.; soda, 3s 9d per lb.; ammonia, 4s 6d per lb.

There has been an unusually heavy demand of late for carbolic acid for export, and manufacturers are fully booked up for several months, in some cases until June. It would appear that the surplus of our Munitions Ministry has long since gone into consumption, and prices have steadily risen until 10 to 10½d was reached this week for 39-40 ice crystals.

Since advising you last week, a further advance of 9d per lb. for mercurials has taken place, making 1s 3d within the fortnight. Makers' prices are today as follows: Oxide red, 8s 7d per lb.; oxide yellow, 7s 11d per lb.; perchloride, 5s 8d per lb.; subchloride, calomel, 7s 9d per lb.

Menthol has further advanced during the week by 9s per lb., sales having been made at 67s 6d to 75s.

Shellac continues to advance strongly, owing to the

brisk demand from all countries, and the higher cost of silver and corresponding higher price of the Indian rupee. Over 600s has been paid for T.N. Orange on the spot, and 630s for fine orange with all future positions full up in price, May being 560s to 600s.

Quicksilver has been sold this week at £24 per bottle. The continuous advance weekly since October is mainly accounted for by decreasing stock here and diminishing arrivals and the corresponding advances in mercurials.

MARKET PRICES IN GERMANY

A circular issued by a firm of importers and exporters in Hamburg says of various products:

Agar-agar—Large orders have cleared the small stocks which were available. Single bales of first quality in strips are offered at 57 marks per kg., cash, ex stations in unoccupied Germany. Supplies lying abroad would command too high a price if imported now, in consequence of the adverse rate of exchange.

Camphor—The demand is very great. The first supply of Japanese slabs is expected to arrive in December—a few cases of about 45 kg. net content. Owing to the depreciated currency, the price will be 350 marks per kilo.

Cascara Sagrada—Owing to the high prices now ruling in England, the German market is following suit, and orders cannot be filled under marks 12.75 gross for net.

Menthol—The increase in price which has taken place on the English and American markets has induced speculators in Hamburg to pay even greater attention to this article, always their favorite for this purpose. These people have succeeded in raising the price to marks 650. The collapse, which is eventually bound to take place, will be an interesting event. Recrystallized (Ph.G.V.) has naturally followed the course of the speculation, but is still obtainable at 675 marks on a firm order.

PRICE OF BENZOL IN ENGLAND

The Complaints Tribunal of the Central Committee, London, England, heard the case of the Woodcote Motor Co. of Epsom against S. Bowley & Sons, Ltd., who charged 2s 6d per gallon for benzol, a profit of 4½d.

The committee were of opinion that no case of profiteering had been made out, and nothing could be alleged against the respondents. The chairman added: "It is quite clear that in relation to benzol there is some attempt being made to make a corner in this trade, and we propose to pass the matter to the committee which sits under the Profiteering Act in connection with Trusts and Combines."

SULPHURIC ACID MERGER IN JAPAN

A merger of the sales departments of four Japanese companies making sulphuric acid is announced from Tokyo. The companies are the Dai Nippon Jinzo Hiryo Kaisha, Kwanto Sanso Kaisha, Tokyo Ryusan Kaisha, and Nippon Jinzo Hiryo Kaisha. The arrangement provides that contracts entered into before the new company was formed shall be carried out by the individual concerns. The price of sulphuric acid on Dec. 3 was yen 19 per 200 pounds for the 65 per cent, while at the close of November it was yen 12.

SHIPMENTS OF CHILIAN NITRATE

The last of the fleet of vessels allocated to the Chili nitrate movement has now cleared for destination, and these sixteen ships may be expected to be soon available for other traffic. These vessels, with a net tonnage of 52,583 tons, have carried in the export of nitrates 80,568 tons of cargo, all passing through the Panama Canal. All of them were operated under the Shipping Board.

The nitrate shipments were as follows: 75,927 tons in fourteen whole cargoes from Chilian ports; 11,200 tons to Halifax, 10,970 tons to Belgian ports, 8,575 tons to La Pallice, 2,357 tons to Havre, 4,150 tons to Nantes, 8,426 tons to Dunkirk, 7,350 tons to Rotterdam, 2,875 tons to Valencia, 7,700 tons to Savannah, 7,509 tons to Wilmington, N. C., and 4,815 tons to New Orleans.

Laird & Adamson, of Liverpool, say of Chilian nitrate: "Early in the month resales were taking place of this year's delivery at about 9s 5½d to 9s 6¼d per quintal for ordinary, f. o. b. Chili. Later, both resellers and the Producers' Association withdrawing, the market became considerably firmer, and except that business was done by outside producers at about 9s 10d for this year's delivery, quotations were difficult to give. Demand is good and increasingly difficult to supply. At the close the Producers' Association is stated to have fixed a new price, namely, 10s 6d for ordinary for a quantity limited to 100,000 tons for delivery up to March 31, 1920. Presumably the premium for refined remains at 2d per quintal. Strikes at various loading ports have been reported. Freight rates are about £11 per ton for steamers and £8 10s to £9 10s for sailers. Exchange is 11 1-32d per dollar paper and 22d gold."

CHEMICAL WAGES IN ENGLAND

The Chemical Employers' Federation of London has prepared a memorandum on the report of the employers' representatives on the Shift Inquiry Committee. They remark that they are impressed by these particular features of the report: (1) That the evidence of unrest was submitted in the main by trades union officials, and was not in any single instance corroborated by the employers, whose experience was that their workmen have not exhibited signs of unrest and discontent; (2) that the reductions in earnings of which complaint was made to the Shift Inquiry Committee were the direct and logical result of a national agreement between the men's unions and their employers.

The present position, the Federation states, is that on the average, day laborers have received advances amounting to 176 per cent and shiftment of 160.7 per cent over pre-war rates; whereas the cost of living is given as being 125 per cent in excess of pre-war. Chemical manufacturers feel, therefore, that these figures discount entirely the grievance in regard to the conversion of 12 to 8-hour shifts. The proposal of the unions for minimum rates of 1s 6d and 1s 8d would impose an impossible burden on the great majority of manufacturers and certainly create unemployment.

Asked whether the French Government imposed duties on the export from French Colonies of palm kernels, the Under-Secretary of State for Foreign Affairs stated in the House of Commons, on Nov. 27, that the French Government has imposed export duties on oleaginous produce shipped from French West African Colonies to all destinations, including France. He added: "It is therefore evident that these duties have not been levied as a retaliatory measure for the duty imposed on palm kernels exported from British West African Colonies to destinations other than the British Empire."

**PRODUCTION OF CHEMICALS IN JAPAN
REVIEWED BY DR. HAKUTARO NISHIDA**

Price of Salt Retards Development of the Soda Industry—Government Laboratory Still Working on Extraction of Nitrogen from the Air—Acids, Alkalis and Electrochemical Products

Dr. Hakutaro Nishida said in a recent interview in Tokyo that the manufacture of sulphate ammonia has developed into a very prosperous chemical industry in Japan as the country has been made self-supporting in respect of this commodity. The production of nitrate lime has also developed with the growth of the electrical furnace industry though there is further room for the development of the industry. The production of nitrate lime in various countries in 1916 was as follows: America 64,000 tons; Germany 36,000 tons; Austria 24,000 tons; Norway 23,500 tons; Italy 22,500 tons; Switzerland 17,000 tons; France 7,500 tons; Sweden 7,500 tons; Japan 3,500 tons.

As to the production of synthetic ammonia the success of the industry seems to be as far away as ever before though we are willing to assume that the Government laboratory for the extraction of nitrogen from the air will achieve success sooner or later. With regard to superphosphate of lime it had been increasing its production every year before the war and as there is an indication of some concerns engaged in the manufacture of alkali giving their attention to super-phosphate of lime it is probable that the production of the latter will be increased in the future.

The result of potash researches conducted by the industrial laboratory in the Department of Agriculture and Commerce and other institutions has been published but nothing has yet been done as to its manufacture.

As regards the manufacture of fuming sulphuric acid there has been some development during the war resulting in the establishment of some factories. As to the soda industry though the Japanese factories are adopting the electrolysis and the Solvay process it can scarcely be said that the future of the industry is promising so long as the principal material, industrial salt, is not supplied at a cheaper rate than is the case at present.

The production of caustic soda in Japan in 1915 amounted to 16,000,000 lbs. valued at 1,000,000 yen. The import of caustic soda, 1916, amounted to 19,900,000 kin valued at 2,939,000 yen.

The production of soda ash in Japan in 1916 amounted to 3,900,000 lbs. valued at 87,590 yen, while its import in the same year reached 64,000,000 yen valued at 3,700,000 yen.

The import of bicarbonate soda in 1915 amounted to 7,570,000 kin valued at 400,000 yen.

It is a well known fact that there has been over-production of potassium chloride and success has been achieved in the manufacture of bleaching powder by an electrolysis of hydrogen for hardening of liquid oils, liquified chlorine, phosphur, iron alloy, carborundum and sodium peroxide. It is however, only the manufacture of phosphorus and iron alloy which has been commenced on a fairly large scale. It is expected that the manufacture of phosphorus and of bleaching powder by an electric process will in the near future prove an incentive for the development of the chemical industry in this country.

A statement appearing in a Liverpool paper, last month, says that a British physician has discovered a new dye, which it is claimed "may supersede all aniline dyes. The new product is said to possess fluorescent properties, and two colors have already been obtained. The dye is obtained from organic substances, and one of the ingredients will have to be controlled by the Government."

Prices Current of Fine and Heavy Chemicals, Drugs, Essential Oils, Dyestuffs and Oils

NOTICE—The prices herein quoted are for large quantities in original packages. All prices are quoted on a basis of avoirdupois pounds and ounces and American gallons. Where the price of a product is indicated by two sets of figures separated by a dash (.16 — .19), it means that various manufacturers or importers of the item quote different prices which are all included within this range.

For the ready reference of foreign buyers, the following table of equivalents is published:

1 Imperial Gallon (Brit.)—1.20 Amer. Gallons
1 American Gallon—1.25 Imperial Gallon
1 American Gallon—3.78 Liters
1 Liter—.264 American Gallon
1 American Gallon (H ₂ O) weighs 8 pounds
1 Pound (Avoirdupois) weighs .454 kilogram
1 Kilogram weighs 2.20 pounds (Avoirdupois)

Fine Chemicals

Acetanilid, C.P., bbls., blk. lb.	.55	—	.56
Acetone	.13½	—	.15
Acetphenetidin	.265	—	.270
Acornite, Sulph., ¼-oz. vials	—	—	—
Adeps Lanae, hydrous, See Lanolin	—	—	—
Anhydrous, See Lanolin	—	—	—
Alcohol 188 proof	—	—	—
190 proof, U.S.P.	—	—	4.75
Cologne Spirit, 190 proof	—	—	5.00
Wood, ref. 96 p.c.	1.85	—	1.60
97 p.c.	1.50	—	1.63
Pure	2.05	—	2.10
Denatured, 180 proof	.71	—	.73
188 proof	.73	—	.75
Aldehyde	1.25	—	1.45
Alolin U.S.P., powd., cryst.	.90	—	.95
Alolin U.S.P., powd., cryst.	.65	—	.70
Ammonium, Acetate, cryst.	—	—	4.00
Benzoate, cryst., U.S.P.	.95	—	1.00
Bichromate, C. P.	.80	—	.81
Bromide, gran., bulk.	.12	—	.12½
Carb.Dom.U.S.Kege, powd.	.24	—	.25
Chloride U.S.P.	—	—	4.65
Iodide	.83	—	.85
Oxalate, Pure	.95	—	1.05
Per sulphate	.95	—	1.00
Phosphate (Dielie)	.95	—	1.00
Salicylate U.S.P.	3.65	—	3.75
Amyl Acetate, bulk drums	—	—	3.75
Antimony Chlor. (Sol. butter of Antimony)	.18	—	.20
Needle powder	.10½	—	.12
Sulphate, 16-17 per cent free sulphur	.35	—	.74
Antipyrine, bulk	.585	—	6.00
Apomorphine Hydrochloride	.10	—	.11
Argols	—	—	35.80
Arsenic, red, See Heavy Chemicals	—	—	—
White, See Heavy Chemicals	—	—	—
Arsenous Iodide, U.S.P.	.95	—	1.00
Aspirin	.30	—	.30
Atropine, Alk. U.S.P., 1-oz. v. oz.	—	—	14.00
Sulphate, U.S.P., 1-oz. v. oz.	—	—	2.25
Barbital	.28	—	.29
Barium Carb. prec., pure	.28	—	.29
Chlorate, pure	.32	—	.35
Iodide	3.30	—	3.25
Bay Rum, Porto Rico	8.20	—	3.25
St. Thomas	8.20	—	3.25
Benzaldehyde (see bitter oil of almonds)	4.25	—	4.50
Benzonaphthol	—	—	34.00
Berberine Hcl.	—	—	31.00
Acid Sulphate, lb.	—	—	35.00
Neutral Sulph.	—	—	3.80
Bismuth Ammon. Citr., U.S.P.	—	—	3.50
Citrate, U.S.P.	—	—	3.20
Oxychloride	—	—	3.95
Salicylate	—	—	4.25
Subbenzoate	—	—	3.00
Subcarbonate, U.S.P.	—	—	3.50
For X-ray Diagnosis	—	—	2.75
Subgallate	—	—	5.20
Subiodide	—	—	2.75
Subnitrate	—	—	2.75

*Nominal

Bismuth Subsalicylate	—	—	3.50
Tannate	—	—	2.80
Metallic	2.80	—	2.85
Borax, in bbls., crystals	.08½	—	.09
Crystals, U.S.P., Kegs.	.08½	—	.09½
Bromides, See Potass. Brom., etc.	—	—	—
Bromine, tech., bulk.	.55	—	.65
Cadmium Bromide, crystals	1.75	—	1.80
Iodide	—	—	4.30
Metal sticks	1.40	—	1.45
Caffeine, alkaloid, bulk.	—	—	7.00
Hydrobromide	8.25	—	8.80
Citrate, U.S.P.	6.00	—	6.25
Phosphate	10.00	—	11.00
Sulphate	9.25	—	9.50
Calcium Glycophosphate	1.70	—	1.75
Iodide	—	—	4.90
Phosphate, Precip.	.21	—	.23
Sulphocarbonate	.85	—	.90
Camphor, Am. ref'd bbls., bk. lb.	—	—	3.30
16's in 1-lb. carton	—	—	3.50
24's in 1-lb. carton	—	—	3.50
32's in 1-lb. carton	—	—	3.50
Japan refined, 2½ lb. slabs	—	—	3.40
Monobromated, bulk	—	—	3.05
Caramel	1.05	—	1.10
Cascin, C.P.	—	—	.40
Castor Oil, AA bbls.	—	—	.20
Cerium Oxalate	.74	—	.78
Chalk, Precip.	.05½	—	.06
Drop	.03	—	.03½
Chloral Hydrate, U.S.P. crystals, drums incl'd 100lb. lots	—	—	.95
Chloroform, drums, U.S.P.	—	—	.30
Chrysarobin, U.S.P.	—	—	4.00
Cinchonidin, Alk. crystals	—	—	1.25
Cinchonine, Alk., crystals	—	—	.74
Sulphate	—	—	10.50
Cocaine, Hydrochl., Cryst.	—	—	10.75
Gran., Powd.	—	—	10.75
Cocoa Butter, bulk	.37½	—	.40
Cases, fingers	.45	—	.46
Codeine, Alk., 10-oz. lots	—	—	11.45
Hydrobromide	—	—	9.10
Nitrate	—	—	10.30
Phosphate	—	—	8.65
Sulphate	—	—	9.10
Cod Liver Oil, Newf'd	90.00	—	92.00
Norwegian	95.00	—	97.00
Collodion, U.S.P.	.30	—	.31
Corrosive Sublimated, see Mercury	—	—	—
Coumarin, refined, see Aromatic Chemicals	—	—	—
Cream of Tartar, cryst., U.S.P.	.55	—	.56
Powdered, 99 p.c.	.55	—	.56
Cresosote, U.S.P.	1.15	—	1.20
Carbonate	5.00	—	5.25
Cresol, U.S.P.	1.54	—	1.16
Dionin, See Morph. Ethyl Hydrochl.	—	—	3.00
Dover's Powder, U.S.P.	2.80	—	2.00
Emetine, Alk., 15 gr. vials	—	—	27.00
Hydrochloride, U.S.P.	—	—	1.25
15 gr. vials	—	—	1.25
Epsom Salts, see Mag. Sulphate	—	—	—
Ether, U.S.P., Conc.	—	—	.17
Washed	—	—	.26
Nitrous, conc.	1.10	—	1.11
U.S.P., 1880	—	—	.34
Anaesthesia	—	—	.21
Eucalyptol, U.S.P., See Aromatic Chemicals	—	—	—
*Formaldehyde	—	—	.38
Gelatin, silver	1.25	—	1.30
Glycerin, C.P.	—	—	.25
Drums and bbls. added	—	—	.27
C. P. in cans	—	—	.24
Dynamite drums included	—	—	.16½
Saponifications, loose	—	—	1.64
Soap Lye, loose	—	—	1.64
Guaiacol, liquid	—	—	6.80
Carbonate	—	—	6.50
Haarlem Oil, dom.	3.50	—	3.75
Imported	—	—	5.50
Hexamethylenetetramine	1.30	—	1.35
Hydrastine, Alk.	—	—	26.50
Hydrochloride	—	—	26.50
Sulphate	—	—	26.50
Hydrogen Peroxide, U.S.P., 10 gr. lots	—	—	7.75
4-oz. bottles	—	—	11.25
8-oz. bottles	—	—	16.50
12-oz. bottles	—	—	19.25
16-oz. bottles	—	—	2.00
Hydroquinone, bulk	—	—	4.50
Ichthyol	—	—	4.50
Iodides, See Potass. Iodide, etc.	—	—	—
Iodine, Resublimed	—	—	4.10
Iodoform, Powdered, bulk	—	—	8.35
Crystals	—	—	8.35

Iron Citrate, U.S.P., VIII.	—	—	1.22
And Ammon. Citrate, U.S.P.	—	—	1.07
Green scales, U.S.P.	—	—	1.33
Iodide	—	—	3.90
Syrup, U.S.P. 1900	—	—	.30
Phosphate, U.S.P.	—	—	1.04
Pyrophosphate, U.S.P.	—	—	1.09
Metallic, Reduced	—	—	.50
*Kamala, U.S.P.	—	—	4.00
Lanolin, hydrous, cans U.S.P.	.35	—	.41
Anhydrous, cans	.35	—	.41
Lead Iodide, U.S.P. VIII.	—	—	3.06
Licorice, U.S.P., Mass.	.54	—	.55
Powdered	.80	—	.90
Sticks	.80	—	.85
Lithium Carbonate	—	—	1.50
Citrate	—	—	2.50
Lycopodium, U.S.P.	—	—	2.50
Magnesium Carb. U.S.P. bbls.	.19	—	.20
Technical, bbls.	.12	—	.13½
Glycophosphate	—	—	4.55
Hypophosphate	1.65	—	1.70
Oxide, tins light	—	—	1.10
Peroxide, cans	—	—	2.15
Salicylate	.60	—	.65
Sulphate, Epsom Salt, tech.	—	—	2.00
U.S.P. 100-lbs.	2.50	—	2.75
Manganese Glycophosphos	2.00	—	3.35
Hypophosphite, U.S.P., VIII.	3.25	—	4.65
Iodide	—	—	.75
Sulphate, crystals	—	—	.35
Menthol, Japanese	12.50	—	12.75
Mercury, flasks, 75 lb.	85.00	—	86.00
Bisulphate	—	—	1.26
Blue Mass	—	—	.81
Powdered	—	—	.83
Blue Ointment, 30 p.c.	—	—	.79
80 p.c.	—	—	1.10
Citrine Ointment	—	—	1.68
Calomel, Amer.	—	—	1.56
Corrosive Sublimated, cryst.	—	—	1.51
Powdered, Granular	—	—	3.81
Iodide, Green	—	—	3.91
Red	—	—	3.81
Yellow	—	—	1.85
Red Precipitate	—	—	1.95
Powdered	—	—	1.97
White Precipitate	—	—	2.02
Powdered	—	—	.82
with chalk	—	—	12.00
Methyl salicylate, see Aromatic Chemicals	—	—	—
Methylene Blue, medicinal	—	—	.29
Milk, powdered	—	—	2.00
Mineral Oil, white	1.00	—	2.00
Morphine, Act., 5-oz.	—	—	8.80
Hydrobromide	—	—	8.80
Hydrochloride	—	—	8.80
Sulphate	—	—	8.80
Diactyl, Alkaloid 10-oz.	—	—	13.10
Diactyl, Hydcl.	—	—	13.45
Ethyl Hydcl.	—	—	6.75
Opium, cases	—	—	8.50
Granular	—	—	8.50
Powdered, U.S.P.	—	—	1.80
Oxgall, pure U.S.P.	—	—	3.50
Papain	—	—	3.10
Paraffin White Oil, U.S.P.	—	—	.35
Parafomaldehyde	—	—	.30
Paris Green, kegs	—	—	.07½
Pepsin, Powd., U.S.P.	—	—	.09
Petrolatum, light amber bbls.	—	—	.15
Lily White	—	—	.18
Snow White	—	—	1.60
Phosphophthalin	—	—	.33
Phosphorus, yellow	—	—	.68
Red	—	—	10.00
Pilocarpine	—	—	9.50
*Podophyllin	—	—	.27
Potassium acetate	—	—	.45
Bicarbonate, U.S.P.	—	—	.75
Bimphate	—	—	.35
C. P.	—	—	.90
Bromide Crystals, bulk	—	—	.85
Granulated	—	—	.15
Chlorate	—	—	.75
Chromate, crystals, yellow	—	—	1.75
tech. 1-lb. c. b. 10	—	—	1.95
Citrate, bulk, U.S.P.	—	—	2.00
Glycophosphate, 75%	—	—	2.35
Hypophosphite, bulk	—	—	1.00
Iodide, bulk	—	—	.80
Lactophosphate	—	—	.39
Pernanganate, U.S.P.	—	—	.60

*Nominal

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SULPHITE SODA
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Antipyrine (Crystals)
Antipyrine Salicylate
Creosote Carbonate
Creosote Medicinal
Guaiacol Carbonate
Guaiacol (Liquid)
Iron Cacodylate
Mercury Cacodylate
Potassium Guaiacol Sulphonate
Sodium Cacodylate
Sodium Methylarsinate

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Salts
Thymol Iodide

Fine Chemicals, Acids, and Crude Drugs

Potassium Salicylate	1.60	1.63
Sulphate, C.P.	1.11	1.16
Tartrate, powdered	1.23	1.23
Procaine, oz. bottles	7.00	7.50
5 gr. bottles	1.90	1.60
Quicksilver, See Mercury		
Quinine Sulph., 100-oz. tins. oz.	—	90
1-oz. tins	—	90
Second Hands, Java	90	95
*Second Hands, Amer.	—	—
Bisulphate, 100-oz. tins. oz.	—	90
Alkaloid	—	1.39
Acetate	—	1.29
Benzoate	—	1.29
Citrate	—	1.29
Dihyd' chloride	—	1.29
Hydrochloride	—	1.19
Hypophosphite	—	1.29
Phosphate	—	1.19
Salicylate	—	1.19
Tannate	—	90
Quinidine Alk. crystals, tins. oz.	—	1.26
Sulphate, tins	—	85
Rosecin crystals, U. S. P. lb.	6.00	6.25
Rochelle Salt, crystals, bxs. lb.	—	30
Powdered, bbls.	—	39
Rosewater, triple	11.50	12.00
Saccharin, U.S.P., soluble. lb.	3.50	3.75
U.S.P., Insoluble	3.50	3.75
Salicin, bulk	—	30.00
Salol, U.S.P., bulk	90	95
Santonin, cryst., U.S.P.	—	100.00
Powdered	—	100.00
Seidlitz Mixture, bbls.	—	30 1/2
Silver nitrate, 500 oz. lots. oz.	81 1/4	82 1/4
Soap, Castile, white pure. lb.	26	28
Powd., U.S.P., bbls.	38	40
Marseilles, white	19	20
Ordinary	15	16
Sodium, Acetate, U.S.P. gran. lb.	25	27
Benzoate, gran., U.S.P.	—	0.94
Bicarb. U.S.P., powd., bbls. lb.	75	76
Bromide, U.S.P., bulk	—	1.40
Cacodylate	—	1.40
Chlorate, U.S.P. 8th Rev.		
crystals, c.b. 10	15 1/4	16
Granular, c.b. 10	—	19
Citrate, U.S.P. Cryst. VIII. lb.	—	1.09
Granular, U.S.P. gran. IX. lb.	—	1.24
Cyanide 96-98, see Heavy Chemicals		
Glycerophosphate, crystals lb.	2.15	2.20
Hypophosphite, U.S.P.	1.00	1.05
Iodide, bulk	35	40
Peroxide	—	13
Phosphate, U.S.P., gran.	17	18
Recryst.	40	45
Dried	—	60
Salicylate, U.S.P.	0.154	0.154
Sulph. (Glauber's Salt)	75	76
Strontium Brom. Cryst., blk. lb.	40	45
Carbonate, pure	—	65
Iodide, bulk	—	1.80
Salicylate, U.S.P.	—	1.80
Strychnine Alk., cryst.	—	1.80
Acetate	—	2.00
Hypophosphite	—	1.80
Hydrochloride	—	1.80
Nitrate	—	1.40
Sulphate, crystals, bulk.	30	31
Sugar of Milk, Powder.	—	35
Cartons, 1 lb.	85	90
Sulphonal, 100-oz. lots	16.00	16.75
Sulphonethylmethane, U.S.P. lb.	13.00	14.00
Sulphonmethane, U.S.P.	3.20	3.50
Sulphur, roll, bbls.	3.35	3.75
Flour, 100 p.c. pure. 100 lbs.	3.85	3.95
Flowers, 100 p.c. pure. 100 lbs.	—	17
Precip., U.S.P.	09	10
Lac Sulphur	67	67 1/2
Tartar Emetic, tech.	73	73 1/2
U.S.P.	98	95
Terpin Hydrate	—	10.50
Theobromine Alkaloid	—	12.50
Thymol, crystals, U.S.P.	—	11.50
Iodide, U.S.P., bulk	—	60
Tin, bichloride, see Heavy Chemicals		
Toluol, See Coal Tar Crude.		
Trional	1.06	1.10
Turpentine, Venice, True.	3.00	3.25
Artificial	14	15
Spirits, see Naval Stores.		
Vanillin, see Aromatic Chemicals		
Witch Hazel, Ext., dble dist.	—	1.15
bbl.	—	16
Zinc Carbonate	45	50
Chloride, U.S.P.	—	3.85
Iodide, bulk	45	75
Metallic, C. P.	22	23
Oxide, U.S.P., bbls.	38	42
Stearate	—	—

*Nominal

Acids

Acetic, 28 p.c. See Heavy Chemicals

Glacial, See Heavy Chemicals		
Acetyl-salicylic	36	1.00
Benzoic, from gum	—	—
U.S.P., ex. toluol.	80	85
Boric, cryst., bbls.	14 1/4	14 1/2
Powdered, bbls.	14 1/4	14 1/2
Butyric, Tech., 60 p.c.	1.45	1.55
Camphoric	6.00	6.30
Carbolic cryst., U.S.P., drs. lb.	18	18
1-lb. bottle	—	26
5-lb. bottle	—	23
50 to 110-lb. tins.	19 1/2	20
Liquid, U.S.P.	—	25
Crude, 25%	24	31
Chromic, U.S.P.	1.25	1.50
Chrysophanic	—	5.00
Citric, crystals, bbls.	—	34
Powdered	—	85
Second hands	—	86
Cresylic, 95-100 p.c.	75	85
Formic, 75 p.c., tech.	30	36
Gallie, U.S.P., bulk.	1.40	1.45
Glycerophosphoric, 25 p.c.	—	2.50
Hydriodic, sp. g. 1.150.	—	19
Hydrofluoric, see Heavy Chemicals		
Hydrosilicofluoric, 10 p.c. tech. lb.	40	45
20 p.c. tech.	50	60
Hypophosphorous, 50 p.c.	2.40	2.50
U.S.P., 10 p.c.	60	65
Lactic, U.S.P., VIII.	—	2.20
U.S.P., IX	—	2.40
Molybdic, C.P.	—	8.50
Muriatic, see Heavy Chemicals		
Nitric, see Heavy Chemicals		
Nitro Muriatic	20	23
Oxalic, cryst., bbls.	32	35
Picric, kegs, see Intermediates		
Phosphoric, 85-88 p.c. syr. U.S.P. lb.	32	33
50 p.c. tech.	21 1/4	22 1/2
Pyrogallie, resublimed	2.50	2.55
Crystals, bottles	2.20	2.25
Salicylic, Bulk, U.S.P.	52	55
Sulphuric, C.P.	08	09
Sulphurous	06	06 1/2
Tannic, U.S.P.	—	1.30
Tartaric Crystals, U.S.P.	60	70
Powdered, U.S.P.	69 1/2	71
Trichloracetic, U.S.P.	4.40	4.50

Crude Drugs

MISCELLANEOUS

Agar, Agar, No. 1	85	86
No. 2	—	80
No. 3	—	75
Almonds, bitter	35	40
Sweet	35	40
Meal	40	45
Ambergris, black ..	—	10.00
Grey	—	23.00
Areca Nuts	30	32
Powdered	33	35
Balm of Gilead Buds.	1.50	2.00
Burgundy Pitch, Dom.	08	09
Cantharides, Chinese	1.40	1.45
Powdered	—	1.55
Russian, whole	—	3.75
Powdered	—	3.95
Charcoal Willow, powdered. lb.	05 1/2	07
Wood, powdered	04	05
Civet	2.50	2.75
Colocynth, Apples, Trieste. lb.	30	35
Pulp, U.S.P.	35	36
Spanish Apples	45	55

*Nominal

Cuttlefish Bones, Trieste.	60	61
Jewelers, large	1.70	1.75
Small	1.55	1.60
French	55	60
Dragon's Blood, Mass.	35	40
Reeds	2.00	2.50
Ergot, Russian	5.00	5.25
Spanish	5.00	5.35
Grains of Paradise.	—	35
Guarana	1.10	1.30
Hops, N. Y., prime.	83	87
Pacific Coast, prime.	85	89
Isinglass, American (see Agar Agar)		
Russian	—	10.00
Kola Nuts, West Indies.	19	21
Honey, Calif.	32	33
Leeches	—	12.00
Lupulin	2.40	2.50
Manna, large flake.	53	60
Small flake	58	60
Moss, Iceland	21	23
Irish	11	15
Musk, pods, Cab.	15.00	16.00
Tonquin	25.00	26.00
Grain, Cab	23.00	25.00
Tonquin	45.00	50.00
*Synthetic	—	30.00
Nux Vomica, whole.	08	08 1/2
Powdered	13	13 1/2
Poppy Heads	—	1.25
Sandalwood	48	50
Ground	55	60
Sassafras, resin	2.50	3.20
Powdered	3.05	3.30
Spermaceti, blocks	29	30
Storax, liquid cases.	1.50	1.60
Tamarinds, bbls.	11 1/4	12 1/4
Kegs	—	6.25

BARKS

Copaiba, Para	47 1/2	50
South American	60	65
*Fir, Canada	—	14.75
Oregon	1.75	1.80
Peru	—	5.00
Tolu	1.50	1.60

BARKS

Angostura	28	30
Basewood Bark, pressed.	17	21
Barberry	—	1.00
Bayberry	50	60
Blackhaw, of root.	60	65
of Tree	35	40
*Buckthorn	1.00	1.25
Calisaya	95	1.00
Cascara Sagrada	15	17
Cascarilla, quills	—	—
Siftings	10	10 1/2
Chestnut, red quills	1.00	1.10
Cinchona	60	65
Broken	—	—
*Yellow "quills"	—	—
*Broken	—	—
*Loxa, pale, bs.	—	—
*Powdered, boxes	—	—
*Maracabo, yellow, powd.	—	—
Condurango	10	10 1/2
Cotton Root	25	40
Cramp (true)	50	55
Cramp (so-called)	09	10
Dogwood, Jamaica	—	10
Elm, grinding	30	40
Select bbls.	73	80
Hemlock	07	08
Lemon Peel	10	10 1/2
Mazecron	25	28
Oak, red	08	09
White	08	09
Orange Peel, bitter.	09	10
Malaga, Sweet	12	13
Trieste, sweet	10	12
Prickly Ash, Southern.	23	25
Northern	33	25
Pomegranate of Root.	26	28
of Fruit	25	28
Sassafras, ordinary	40	45
Select	50	55
Simaruba	50	55
Soap, whole	12 1/2	15
Cut	33	34
Crushed	—	21
Wahoo, of Root.	70	80
of Tree	30	35
Willow, Black	06	07
White	16	17
White Pine Rosed.	07	08
White Poplar	07	08
Wild Cherry	15	31
Witch Hazel	08	09

*Nominal

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BEANS			LEAVES AND HERBS					
Calabar	lb.	.40 — .45	*Aconite	lb.	.60 — .70	Colchicum	lb.	1.60 — 1.65
Caster	lb.	.06% — .06%	Balmof	lb.	.15 — .17	Colombo, whole	lb.	.24 — .29
St. Ignatius	lb.	— .50	Bay, true	lb.	— .17	Comfrey	lb.	.25 — .26
St. John's Bread	lb.	— .50	Belladonna	lb.	.30 — .32	Culver's	lb.	.25 — .30
Tonka, Angostura	lb.	— 1.75	Boncel, leaves and tops	lb.	.16 — .18	Cranebill, see Geranium	lb.	— .22
Para	lb.	1.15 — 1.25	Buchu, short	lb.	2.35 — 2.45	Dandelion, English	lb.	.23 — .24
Surinam	lb.	1.00 — 1.10	Long	lb.	— .17	American	lb.	.21 — .22
Vanilla, Mexican, whole	lb.	4.50 — 5.50	Cannabis, true, imported	lb.	— .17	Doggrass, genuine	lb.	.65 — .70
Cuts	lb.	3.25 — 3.50	American	lb.	.20 — .35	Cut Bermuda	lb.	.29 — .30
Bourbon	lb.	3.00 — 3.25	Catnip	lb.	.15 — .16	Echinacea	lb.	— .50
South American	lb.	3.25 — 3.75	Chestnut	lb.	.06 — .07	Elecampane	lb.	.15 — .17
Tabiti, Yellow Label	lb.	2.75 — 3.00	Chiretta	lb.	.25 — .26	Galangal	lb.	.28 — .30
Green Label	lb.	— 2.75	*Coca, Huancu	lb.	— .17	Gelsemium	lb.	.16 — .17
BERRIES			Coltsfoot	lb.	.60 — .70	Gentian	lb.	.12 — .13
Cube, ordinary	lb.	1.40 — 1.45	Conium	lb.	.18 — .19	Geranium	lb.	— .28
XX	lb.	1.45 — 1.50	Corn Silk	lb.	.12 — .14	Ginger, Jamaica, unbleached	lb.	.27 — .28
Powdered	lb.	— 1.50	Damiana	lb.	— .14	Bleached	lb.	.30 — .32
Fish	lb.	— .50	Deer Tongue	lb.	.12 — .14	*Ginseng, Cultivated	lb.	3.00 — 2.00
Horse, Nettle, dry	lb.	.40 — .45	Digitalis, Domestic	lb.	.27 — .28	Wild, Eastern	lb.	5.00 — 10.00
Juniper	lb.	— .07	Imported	lb.	.30 — .32	Northwestern	lb.	5.00 — 22.00
Laurel	lb.	.08 — .10	Eucalyptus	lb.	.10 — .11	Southern	lb.	— .17
Poke	lb.	— .22	Euphorbia Pilulifera	lb.	.15 — .16	Golden Seal	lb.	5.90 — 6.00
Prickly Ash	lb.	.15 — .16	Grindelia Robusta	lb.	.14 — .15	Powdered	lb.	6.50 — 6.75
Saw Palmetto	lb.	.18 — .20	Hembane, German	lb.	— .15	*Helibore, Black, Imported	lb.	1.40 — 1.50
Sloe	lb.	.25 — .30	*Russian	lb.	1.20 — 1.25	White, Domestic	lb.	.20 — .21
FLOWERS			Domestic	lb.	.35 — .40	Powdered	lb.	.23 — .24
Arnica	lb.	.25 — .40	Henna	lb.	.62 — .65	*Imported	lb.	.21 — .23
Borage	lb.	.60 — .70	Horehound	lb.	— .16	Ipecac, Cartagena	lb.	3.20 — 3.25
Calendula Petals	lb.	— 2.75	*Jaborandi	lb.	— .60	Powdered	lb.	3.40 — 3.50
Chamomile, German	lb.	— .53	Laurel	lb.	.07% — .08	Rio, whole	lb.	3.10 — 3.20
Hungarian type	lb.	.35 — .40	Life Everlasting	lb.	.10 — .11	Powdered	lb.	3.40 — 3.50
Roman	lb.	.35 — .40	Liverwort	lb.	.21 — .25	Jalap, whole	lb.	.80 — .85
Spanish	lb.	.11 — .12	Lobelia	lb.	.75 — .80	Kava Kava	lb.	.28 — .30
Clover Tops	lb.	.11 — .12	Matico	lb.	.20 — .23	Lady Slipper	lb.	1.00 — 1.15
Dogwood	lb.	.17 — .18	Marjoram, African	lb.	.44% — .45	Licorice, *Russian, cut	lb.	.80 — .90
Elder	lb.	.90 — .95	French	lb.	.45 — .45%	Spanish natural bales	lb.	.17 — .18
Insect, open	lb.	.50 — .55	Motherwort herb	lb.	.16 — .17	Selected	lb.	.24 — .25
Closed	lb.	.55 — .60	Patchouli	lb.	.76 — .85	Powdered	lb.	.73 — .75
Powd. Flowers and stems	lb.	.55 — .60	Pennyroyal	lb.	.12 — .16	*Lavage, American	lb.	.25 — .26
Powd. Flowers	lb.	.50 — .55	Peppermint, American	lb.	.26 — .30	Manaca	lb.	.35 — .38
*Kousso	lb.	.50 — .60	Pichi	lb.	.11 — .12	Mandrake	lb.	— .25
Lavender, ordinary	lb.	.18 — .20	Prince's Pine	lb.	.21 — .22	Musk, Russian	lb.	1.90 — 2.00
Select	lb.	.26 — .28	Plantain	lb.	.12 — .14	Orris, Florentine bold	lb.	.20 — .21
Linden, with leaves	lb.	.35 — .37	Pulsatilla	lb.	2.50 — 3.00	Verona	lb.	.20 — .21
Without Leaves	lb.	.50 — .55	Queen of the Meadow	lb.	.10 — .11	Pareira Brava	lb.	.30 — .32
Malva, blue	lb.	1.00 — 1.10	Rose, red	lb.	1.00 — 1.10	Pellitory	lb.	.29 — .31
Black	lb.	.55 — .60	Rosemary	lb.	.12 — .14	Pink, true	lb.	1.25 — 1.50
Mullein	lb.	1.68 — 1.70	Rue	lb.	.28 — .29	Pleurisy	lb.	— .23
Orange	lb.	1.95 — 2.00	Sage, Austrian, stemless	lb.	— .29	Poke	lb.	.18 — .20
Peppery, red	lb.	.95 — 1.10	Grinding	lb.	— .22	Rhatany	lb.	.12 — .14
Rosemary	lb.	.69 — .75	*Greek, stemless	lb.	.21 — .22	*Rhubarb Shenai	lb.	— .17
Saffron, American	lb.	.33 — .35	Spanish	lb.	.15 — .16	Chips	lb.	— .17
Valencia	lb.	15.00 — 15.25	Savory	lb.	.19% — .20	Cuts	lb.	— .17
Tilia (see Linden)	lb.	— .15	Senna, Alexandria, whole	lb.	.75 — .90	High Dried	lb.	— 1.75
GUMS			Half Leaf	lb.	.45 — .50	Sarasapilla, Honduras	lb.	.66 — .70
Aloe, Barbados	lb.	.98 — 1.05	Siftings	lb.	.25 — .28	American	lb.	.38 — .43
Cape	lb.	.13 — .14	Powdered	lb.	.30 — .35	Mexican	lb.	.45 — .46
Curacao, cases	lb.	.90 — .95%	Tinnevely	lb.	.16 — .18	Senega, Northern	lb.	— 2.50
Socotrine, whole	lb.	.75 — .80	Pods	lb.	.10 — .12	Southern	lb.	— 2.50
Powdered	lb.	— .80	Skullcap, Western	lb.	.40 — .45	Serpentaria	lb.	.75 — .80
Ammoniac, tears	lb.	— .15	Spearmint American	lb.	.20 — .22	Skunk Cabbage	lb.	.20 — .22
Powdered	lb.	1.40 — 1.45	Squaw Vine	lb.	.35 — .36	Snake, Canada natural	lb.	— .45
Arabic, firsts	lb.	.30 — .40	Stramonium	lb.	.36 — .40	Stripped	lb.	.50 — .55
*Seconds	lb.	— .15	Tansy	lb.	— .15	Spikenard	lb.	.32 — .35
Sorts Amber	lb.	1.5% — .16	Thyme, Spanish	lb.	.11 — .11%	Squill, white	lb.	.12 — .13
Powdered	lb.	.27 — .30	French	lb.	.14 — .14%	Stillingia	lb.	— .18
Asafoetida, whole, U.S.P.	lb.	3.70 — 3.85	Uva Ursi	lb.	.09 — .10	Stone	lb.	.12 — .14
Powdered	lb.	4.50 — 5.00	Witch Hazel	lb.	.08 — .10	Turmeric Madras	lb.	.10% — .11
Benzoin, Siam	lb.	.80 — 1.00	Wormwood imported	lb.	.14 — .15	Aleppy	lb.	.09 — .09%
Sumatra	lb.	.33 — .36	Yerba Santa	lb.	.14 — .15	Chins	lb.	.07% — .08
Camphor, ref. See Pg. 28 Col. 2	lb.	— .15	ROOTS			Unicorn false (Helonias)	lb.	.55 — .60
Catechu	lb.	.11 — .15	Aconite, U.S.P.	lb.	— .90	True (Aletia)	lb.	.95 — 1.10
Chicle, Mexican	lb.	1.20 — 1.35	*Alkanet	lb.	2.25 — 2.50	Valerian, Belgian	lb.	.55 — .58
Euphorbium	lb.	.28 — .30	Althea, cut	lb.	— .85	*English	lb.	— .17
Powdered	lb.	— .30	Whole	lb.	.35 — .40	*German	lb.	— .17
Galbanum	lb.	1.38 — 1.45	Angelica American	lb.	.35 — .37	*Japanese	lb.	— 1.25
Gambier	lb.	.11 — .12	Imported	lb.	.59 — .69	Yellow Dock	lb.	.13 — .15
Gamboge	lb.	1.80 — 1.90	Arnica	lb.	.85 — 1.00	*Yellow Parilla	lb.	— .30
Guaiac	lb.	.85 — 1.00	Arrowroot	lb.	— .10	SEEDS		
Hemlock	lb.	.83 — .90	Bermuda	lb.	— .60	Anise, Levant	lb.	.20 — .20%
Kino	lb.	— .50	St. Vincent	lb.	— .16	Star	lb.	.19 — .19%
Mastic	lb.	.95 — 1.00	Bamboo Brier	lb.	.10 — .12	Spanish	lb.	.20 — .20%
Myrrh, Select	lb.	.85 — .90	Bearsfoot	lb.	.06 — .09	Canary, *Spanish	lb.	— .10
Sorts	lb.	.70 — .78	Belladonna	lb.	.50 — .65	Morocco	lb.	.08% — .08%
Siftings	lb.	— .15	Berberis, Aquifolium	lb.	.15 — .17	South American	lb.	.12 — .12%
Olibanum, siftings	lb.	.15 — .16	Beth	lb.	.18 — .20	Caraway, African	lb.	.11 — .11%
Tears	lb.	.18 — .30	Blood	lb.	.33 — .38	Dutch	lb.	— .11%
Opium, See Pg. 28 Col. 3	lb.	— .70	Blueflag	lb.	— .45	Domestic	lb.	— .11%
Sandarac	lb.	.65 — .70	Bryonia	lb.	.24 — .26	Cardamom, bleached	lb.	1.50 — 2.00
*Sengal, picked	lb.	— .15	Burdock, Imported	lb.	.18 — .19	Celery	lb.	.30 — .31
Sorts	lb.	— .15	American	lb.	.16 — .17	Colchicum	lb.	2.00 — 2.10
Spruce	lb.	1.00 — 1.50	Calamus, bleached	lb.	.60 — .65	Conium	lb.	.39 — .40
Storax, Art. cases	lb.	1.28 — 1.60	Unbleached, natural	lb.	.16 — .17	Coriander, Bombay	lb.	.05% — .05%
Thus	lb.	— .17	Cohosh, black	lb.	.00 — .10	Morocco, Unbleached	lb.	.05% — .05%
Tragacanth, Aleppo first	lb.	5.35 — 5.50	Blue	lb.	.13 — .14	Bleached	lb.	.00 — .00%
Seconds	lb.	— 4.25	*Nominal.			*Nominal.		
*Thrida	lb.	— 2.50						
*Nominal.	lb.	— .15						

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Essential Oils, Oleoresins, Aromatic and Heavy Chemicals

*Cumin, Levant	—	—
*Malta	—	—
Morocco	10½	10½
Dill	11	11½
Fennel, French	13½	14
German	14	16
Bombay	12½	13
Flax, whole	20.00	22.00
Ground	11	12
Foenugreek	10	10½
Hemp, Manchurian	10	10½
Chilian	10	10½
Job's Tears, white	10½	10
Larkspur	33	35
Lobelia	—	1.50
Mustard, Bari, Brown	—	—
Dutch	25	26
Bombay, Brown	14½	15
California brown	16	16½
Chinese, Yellow	10½	10½
English, yellow	20	21
Parsley	28	29
Poppy, Dutch	50	51
Russian blue	—	—
Indian	33	34
White Indian	12½	13
Quince	1.00	1.10
Kape, English	—	—
Japanese small	12½	12½
Domestic	10½	10
Sabadilla	16	17
Stramonium	25	26
Strophanthus, Hispidus	1.55	1.60
Kombe	1.75	2.00
Sunflower, domestic	—	—
South American	10	10½
Worm, American	35	40
Levant	1.20	1.25

SPICES

Capsicum, African pods	17	18
Bombay	15	16
Japan Caps	19	20
Cassia Buds	22	24
China, Selected, mats	19	20
Saigon, assortment	45	47
Chilies, Japan	27	28
Mombasa	18	19
Cinnamon, Ceylon	35	38
Cloves, Zanzibar	48	40
Amboyas	54½	55
Penang	70	80
Ginger, African	12½	13
Jamaica, white good	27	28
Japan	14½	15
Mace, Siam	48	49
Banda, No. 2	41	42
Batavia, No. 2	37½	38
Nutmegs, 110s	32	33
75s-80s	34	35
Pepper, Black Sing.	17	17½
White	29	30
Pimento, Select	10½	10

WAXES

Bayberry	45	47
Bees, light, crude	43	44
Light, refined	48	49
Dark	47	48
Candelilla	31	32
Carnauba, Flor.	95	96
No. 1, North Country	85	86
No. 2, North Country	—	65
No. 3, Fatty Gray	48	50
Chalky	45	48
Ceresin, Yellow	14	15
White	16	17
Japan	19	20
Montan, crude	35	36
*Bleached	—	—
Ozokerite, crude, brown	35	36
*Green	—	—
*Refined, white	—	—
*Domestic	—	—
Refined, yellow	—	—
Paraffin, ref'd 128-130 deg. m.p.	—	10½
*Foreign, 130-132 deg. m.p.	10	10½
Stearic Acid, see Vegetables Oils, pg. 40	—	—
*Nominal	—	—

Essential Oils

Almond, Bitter, U.S.P.	8.25	9.75
Bitter, f.f. P. A.	9.50	10.00
Artificial, U.S.P.	1.25	2.00
Sweet .....	.95	1.00
Peach Kernel .....	.45	.47
Anise, U.S.P.	1.50	1.70
Bay	5.00	5.25
Bergamot	4.75	5.00
Artificial	—	4.35
Bois de Rose	10.00	10.50
Cajuput, Native .....	.85	.90
U.S.P.	1.00	1.25
Camphor, Sassafras .....	.12	.14
Japanese, white .....	.27	.29
Caraway, Rectified	4.75	5.00
Cassia, Technical	2.35	2.40
Lead, Free	2.45	2.55
Redistilled, U.S.P.	2.85	2.95
Cedar, Leaf	2.15	2.25
Cedar Wood, light .....	.30	.32
Cinnamon, Ceylon, heavy	—	28.00
Citronella, Ceylon .....	.65	.66
Java .....	.98	1.00
Cloves, can	3.90	3.95
Bottles	3.95	4.00
Copaiba, U.S.P. ....	.90	.95
Coriander, U.S.P.	—	50.00
Croton	1.35	1.40
Cubeba, U.S.P.	9.00	9.75
Cumin	8.50	9.50
Erigeron	7.25	7.50
Eucalyptus, Australian, U.S.P.	1.00	1.05
Fennel, sweet, U.S.P.	2.75	3.00
Geranium, Rose Algerian	8.50	9.25
Bourbon (Reunion)	8.25	8.80
Turkish	4.75	5.00
Ginger	7.75	8.00
Gingergrass	—	3.25
Hemlock .....	.90	1.00
Juniper Berries, rect.	6.50	8.00
Twice rect.	7.50	9.00
Wood	1.50	1.75
Lavender Flowers, U.S.P.	10.50	11.50
Garden .....	.75	1.00
Spike	—	2.00
Lemon, U.S.P.	1.50	1.55
Lemongrass, Native	2.90	3.00
Limes, Expressed	3.50	3.75
Distilled	1.00	1.10
Linaloe	6.75	7.00
Mace, distilled	1.65	1.70
Mirbane, ref. see Aromatic Chemicals	—	—
Mustard, natural	25.00	30.00
Artificial	8.50	9.00
Neroli, bigarade	165.00	120.00
Petale	140.00	150.00
Artificial	18.50	35.00
Nutmeg, U.S.P.	1.70	1.75
Orange, bitter	3.75	4.25
Sweet, West Indian	4.25	4.50
Italian	5.00	5.25
Origanum, Imitation .....	.30	.40
Orris Concrete	5.00	5.25
Patchouli	25.00	30.00
Pennyroyal, domestic	1.90	2.05
Imported	1.75	2.00
Peppermint, Natural, tins.	8.00	8.25
Redistilled, U.S.P.	8.50	8.75
Japanese	3.75	4.00
Petit Grain, So. America	9.00	9.50
French	2.25	2.50
Pinus Sylvestris	—	5.25
Pumilio	—	5.25
Rose, French	15.00	17.00
Bulgarian	13.50	17.50
Artificial	2.75	3.25
Rosemary	1.20	1.25
Sandalwood, East India	10.75	11.00
Sassafras, natural	1.80	2.00
Artificial .....	.85	.90
Savin	6.00	6.25
Spearment	12.50	13.00
Spruce .....	.90	.95
Tansy, Amer.	6.00	7.00
Thyme, red, French, U.S.P.	1.70	1.75
White, French	2.10	2.25
Wintergreen, sweet birch	6.00	6.15
Genuine Gaultheria	10.50	10.75
Synthetic, U.S.P., bulk	—	.80
Wormseed, Baltimore	6.25	6.50
Wormwood, Dom.	11.50	12.00
Ylang Ylang, Bourbon	—	15.00
Manila	35.00	40.00
Artificial	—	24.00

OLEORESINS

Capsicum, 1-lb. bottles	4.00	4.25
Aspidium (Malefern)	8.50	9.00
Cube	7.75	8.00
Ginger	4.00	4.25
Malefern	8.50	9.00
Mullein (so-called)	5.00	5.25
*Orris, domestic	—	30.00
Imported	20.00	21.00
*Parsley Fruit (Petroselinum)	7.50	8.00
Pepper, black	—	7.00

Aromatic Chemicals

Acetophenone	4.50	5.75
Amyl Salicylate	1.85	2.00
Anethol	2.75	3.00
Anisole Aldehyde, C.P.	7.00	7.25
Benzyl Acetate	1.75	2.00
Benzyl Alcohol	2.25	2.75
Benzyl Benzoate	3.50	4.50
Imported	—	3.50
Borneol	—	11.50
Bromostyrol	11.50	12.00
Cinnamic Acridine	8.00	6.00
Cinnamic Alcohol	40.00	45.00
Cinnamic Aldehyde	7.25	7.50
Citral	4.50	4.75
Citronellol	16.00	18.00
Imported	—	30.00
Coumarin	7.75	8.00
Ethyl Cinnamate	6.00	8.00
Eucalyptol	1.40	1.65
Eugenol	8.50	6.50
Geraniol, from Citronella	5.75	6.50
Geranyl Acetate	—	—
Geranyl	—	4.35
Heliotropin	4.35	4.50
Indol, C. P.	—	20.00
Imported	—	30.00
Iso-Eugenol	10.00	12.00
Linalol	7.00	12.00
Linalol Acetate	13.50	15.00
Linalol Benzoate	—	18.00
Menthol	12.50	12.75
Methyl Anthranilate	—	14.00
Methyl Cinnamate	7.00	7.25
Methyl Paracresol	—	16.00
Methyl Salicylate	—	.80
Mirbane, rect., drums extra .....	.16	.17
Musk Ambrette	92.00	100.00
Musk Ketone	—	45.00
Musk Xylene	12.00	14.00
Phenylacetaldehyde	58.00	55.00
Phenylethyl Alcohol	28.00	40.00
Phenylacetic Acid	12.00	20.00
Rhodinol	20.00	22.00
Imported	—	30.00
*Safrol	—	—
Terpineol, C. P.	—	1.25
Imported	—	1.70
Thymol	—	12.50
Vanillin .....	.95	1.05
Violet, artificial	12.00	18.00

Heavy Chemicals

Acetic acid, 28 p.c., bbls., Incl.	—	3.75
56 p.c., bbls.	100 lbs.	6.50
70 p.c., bbls.	100 lbs.	7.50
30 p.c., bbls.	100 lbs.	8.00
Redistilled	100 lbs.	8.50
Pure	100 lbs.	9.90
Glacial, bbls.	12.75	13.00
Alum, ammonia, lump .....	.04	.04½
Ground .....	.04½	.04½
Powdered .....	.15	.16
Chrome .....	.07½	.08
Potash lump .....	.17	.18
Chrome .....	.09	.09½
Ground .....	.07½	.08
Alum, Potash, Powdered	—	6.25
Soda, Ground	—	.05
Aluminum chloride, carboys	—	.15
Anhydrous	2.75	3.00
Sulph.	1.70	1.85
Low grade .....	.15	.18
Aluminum hydrate light .....	.08½	.10
Heavy .....	.10	.12
Arsenic, white .....	.10	.12
Red .....	.30	.32
Arsenious Acid .....	.11	.11½
Ammonia, Anhydrous .....	.33	.35
Ammonia Carbonate .....	.12½	.13½
Ammonia Water, 26 deg., car.	—	.104
20 deg., carboys	—	.094
18 deg., carboys	—	.084
16 deg., carboys	—	.075
*Nominal	—	—

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Heavy Chemicals, Coal-tar Crudes, Intermediates, and Colors

Ammonium chloride, U.S.P. lb.	38 1/2	Pyroligneous Acid, Tech. gal.	12	12 1/2	Dinitronaphthalene lb.	45	50
Sal Ammoniac, gray lb.	12 1/2	Saltpetre, Granulated lb.	14	14	Dinitrotoluol lb.	38	40
Granulated, white lb.	15	Salt Cake lb.	17.00	18.00	Diphenylamine lb.	65	70
Lump lb.	23 1/2	Soda Ash, 58 p.c. light, 100 lbs.	1.90	2.15	Dioxynaphthalene lb.	—	—
Sulphate, foreign 100 lbs.	7.00	Dense 58 p.c. bags, 100 lbs.	2.40	2.65	"G" Salt lb.	65	75
*Dom., double bags, 100 lbs.	7.00	Caustic, 76 p.c. lb.	—	—	Hydrazobenzene lb.	1.50	2.00
Antimony, Sulphuret lb.	—	F.o.b. Wks., basis 60, 100 lbs.	3.00	3.30	Metaphenylenediamine lb.	1.10	1.15
Crimson F. lb.	40	F. A. S. 100 lbs.	4.25	4.35	Metanitriline lb. ....	.95	1.00
Golden No. 1 lb.	45	Ground, 76 p.c. 100 lbs.	4.50	4.75	Metanitrilparatoluine lb.	3.40	3.60
No. 2 lb.	30	Sodium Acetate lb. ....	.06 1/2	.07	Methylantraquinone lb. ....	.09	.12
Vermillion lb.	35	Bisulphate lb. ....	.19	.22	Monoethylaniline lb.	2.15	2.25
Blanc Fixe, dry lb.	63 1/2	Carbonate, Sal. Soda in bbls.	1.25	1.35	Naphthalenediamine lb.	—	—
Barium chloride lb.	95.00	Bicarbonate lb.	2.35	2.45	a-Naphthol, crude lb. ....	.90	.95
Imported lb.	95.00	Chlorate lb. ....	.12	.15	b-Naphthol, distilled lb.	—	.55
Binoxide lb.	23	Cyanide 95-98 lb. ....	.30	.32	Sublimed lb. ....	.65	.75
Nitrate lb.	11	Hyposulph. bbls. gran. 100 lbs.	—	3.60	a-Naphthylamine lb. ....	.33	.35
Barytes, floated, white lb.	25.00	Kegs 100 lbs.	—	3.85	b-Naphthylamine, tech. lb.	1.15	1.25
Off color lb.	14.00	Nitrate, tech. 100 lbs.	2.95	3.15	Neuillie Winter's Acid lb.	1.70	1.90
Bleaching Pd., f.o.b. wks. 100 lbs.	2.50	Phosphate 100 lbs.	3.25	3.40	Nitrobenzol lb. ....	.16	.17
Export F.A.S. 100 lbs.	—	Refined lb. ....	.07	.07 1/2	Nitrochlorbenzol lb. ....	.40	.45
Calcium Acetate 100 lbs.	2.00	Nitrite lb. ....	.12 1/2	.13	Nitronaphthalene lb. ....	.30	.35
Carbide lb. ....	.05	Prussiate, Yellow lb. ....	.25	.26 1/2	o-Nitrophenol lb. ....	.75	.85
Carbonate lb. ....	.01 1/4	Silicate, 60 deg. lb.	2.85	3.25	p-Nitrotoluol lb.	1.15	1.40
Light lb. ....	.03 1/2	40 deg. lb. ....	.02	.02 1/2	Nitrotoluol lb.	—	—
Heavy lb. ....	.03	Sulphide, 60 p.c. lb. ....	.05	.05 1/2	o-Nitrotoluol lb. ....	.17	.23
Chloride, f.o.b. N.Y. ton	20.00	30 p.c. crystals lb. ....	.03	.03 1/2	Para-Amdolphenol, Base lb.	2.75	3.00
Granulated, f.o.b. N.Y. ton	25.00	Sulphite lb. ....	.03	.03 1/2	H. C. L. lb.	2.50	4.00
Chlorine, liquefied lb. ....	.00 1/2	Sulphate, Gl' b. salt, 100 lbs.	1.40	1.50	Paranitraniline lb.	1.15	1.25
Carbon bisulphide lb. ....	.11	Sulphur Dioxide Com. lb. ....	.08	.11	p-Phenylenediamine lb.	2.25	2.50
Carbon tetrachloride lb. ....	.11	Sulphur crude lb.	25.00	30.00	Phthalic Anhydride lb. ....	.60	.90
Copper Carbonate lb. ....	.28	Flour Com'l., bbls. 100 lbs.	1.60	2.00	Phosgene lb.	—	.75
Subacetate (Verdigris) lb. ....	.45	Roll, 100 p.c. 100 lbs.	3.20	3.40	Phenyl-Cumol lb.	—	—
Powdered lb. ....	.40	Flowers 100 p.c. 100 lbs.	3.55	3.95	"P" Salt lb.	6.25	6.50
Cyanide chlor. Mix., 72-76 lb. ....	.27	Sulphuric Acid, Tank carlots	—	—	Resorcin, Technical lb.	3.50	5.00
Sulphate, 98-99 p.c. 100 lbs.	8.12 1/2	60 deg. f.o.b. wks. ton	—	16.00	Sodium Naphthionate lb.	—	1.10
99 p.c. carlots, N.Y. 100 lbs.	8.37 1/2	66 deg. f.o.b. wks. ton	21.00	23.00	Schaefer Salt lb. ....	.55	.60
Copperas, f.o.b. works, 100 lbs.	1.30	Oleum, f.o.b. wks. ton	22.00	25.00	Tetranitromethylaniline lb.	—	2.50
Fluorspar, Powdered lb.	42.00	Tannic Acid, Tech. lb. ....	.50	.60	Tolidin lb.	—	1.65
Acid Grade lb.	50.00	Tin, bichloride lb. ....	.21 1/4	.22 1/4	Mix Tolidine lb. ....	.44	.50
Fusel Oil, crude lb.	2.50	Crystals lb. ....	.43	.45	o-Tolidine lb. ....	.25	.30
Refined lb.	3.75	Whiting 100 lbs.	1.50	1.75	p-Tolidine lb.	1.75	2.00
Hydrofluoric Ac. 68 p.c. bbls. lb. ....	.05	Zinc, carbonate lb. ....	.18	.21	m-Toluylenediamine lb.	1.25	1.35
48 p.c. in carboys lb. ....	.11	Chloride, Fused lb. ....	.08	.10	Xylene, pure lb. ....	.40	.50
53 p.c. in carboys lb. ....	.12	Granulated lb. ....	.11	.13	Xylene Com. gal. ....	.40	.50
Lactic Acid, 22 p.c. lb. ....	.05	Oxide, French lb. ....	.12	.13	Xylidine lb.	—	.50
Lead, Acetate, white crys. lb. ....	.13 1/2						
Broken Cakes lb. ....	.14						
Granulated lb. ....	.13 1/4						
Arsenate, powdered lb. ....	.28						
Paste lb. ....	.13 1/2						
Nitrate lb. ....	.15						
Oxide, Litharge, Amer. pd. lb. ....	.09						
Foreign lb. ....	.13						
Red, American lb. ....	.10 1/4						
Sulphate, basic lb. ....	.08 1/4						
White, Basic Carb., Amer. dry lb. ....	.09 1/4						
in Oil, 100 lbs. or over lb. ....	.13						
English lb. ....	.13						
Lithopone lb. ....	.07						
Lime, hydrate lb. ....	.07						
Acetate 100 lbs.	2.00						
Sulphur solution gal. ....	.17						
Manganese Chlor. lb. ....	.15						
Sulp. lb. ....	.15						
Magnesite lb.	65.00						
f.o.b. N. Y. lb. ....	.03 1/2						
Muriatic Acid, 18 deg. carboys. 100 lbs.	1.65						
20 deg. carboys. 100 lbs.	1.65						
22 deg. carboys. 100 lbs.	1.65						
Nickel oxide lb. ....	.40						
Salts, single lb. ....	.14						
double lb. ....	.12						
Nitre Cake lb.	4.25						
Nitric acid, 63 deg. carboys lb. ....	.05						
38 deg. carboys lb. ....	.06 1/4						
40 deg. carboys lb. ....	.06 1/2						
Phosphoric Acid, 85-88 p.c. lb. ....	.33						
90 p.c. tech. lb. ....	.31 1/2						
Phosphorus red lb. ....	.40						
Yellow lb. ....	.35						
Sesquisulphide lb. ....	.42 1/2						
Plaster of Paris bbl.	1.50						
True Dental bbl.	1.75						
Potash Caustic, 88-92 lb. ....	.28						
Sticks lb.	1.00						
Potassium Bichromate lb. ....	.30						
Carbonate, calc. U.S.P. lb. ....	.65						
88-85 p.c. lb. ....	.24						
85-90 p.c. lb. ....	.23						
90-95 p.c. lb. ....	.24						
95-98 p.c. lb. ....	.25						
Chlorate, cryst. lb. ....	.15						
Powdered, American lb. ....	.15						
Japanese lb. ....	.16						
Muriate, basis 90 p.c. lb. ....	.55						
Permanganate, Com'l. lb. ....	.95						
Prussiate, red lb. ....	.35						
Yellow lb. ....	.35						
Sulphate lb.	—						

Dyestuffs, Tanning Materials and Accessories

COAL-TAR CRUDES

*Benzol C. P. gal.	37	32
(90 p.c.) lb. ....	.26	.31
Cresylic acid, crude 95-97 p.c. gal. ....	.75	.80
50 p.c. lb. ....	.40	.40
25 p.c. lb. ....	.40	.40
Cresol, U.S.P. lb.	15 1/4	.17
Cresosote oil, 25 p.c. gal. ....	.40	.45
Dip. oil, 25 p.c. gal. ....	.40	.45
Naphthalene, balls lb. ....	.08 1/4	.09 1/4
Flake lb. ....	.07	.08
*Phenol lb. ....	.12	.17
*Export lb. ....	.19	.20
Pitch, various grades, ton	14.00	18.00
Solvent naphtha, waterwhite gal. ....	.22	.25
Crude heavy lb. ....	.16	.18
*Toluol, pure lb. ....	.28	.32
*Commercial, 90 p.c. lb. ....	.28	.32
Xylol, pure water white gal. ....	.40	.45
Commercial gal. ....	.30	.35

INTERMEDIATES

Acid B lb.	—	2.25
Acid Cleve lb.	2.00	2.15
*Acid H lb.	1.70	1.75
Acid Metaniline lb.	1.60	1.75
Acid Monosulphonic lb.	—	.15
Acid Naphthionic, Crude lb. ....	.65	.75
Refined lb.	1.00	1.10
Acid Picric lb. ....	.25	.50
Acid Sulphanilic, crude lb. ....	.25	.30
Refined lb.	—	.35
*Aminobenzenes lb.	—	—
*Aniline Oil lb. ....	.33	.35
*Aniline Salts lb. ....	.42	.45
Aniline for red lb. ....	.60	.65
Anthracene (40 p.c.) lb. ....	.65	.70
Anthraquinone lb.	5.50	6.00
Benzaldehyde, Tech. lb. ....	.75	.85
U.S.P. & F.F.C., see Aromatic Chemicals	—	—
Benzidine Base lb.	1.25	1.35
Benzidine Sulphate lb.	1.00	1.10
Benzoate of Soda, U.S.P. lb. ....	.80	.85
Benzylchloride, 95-97 lb. ....	.26	.28
Diamidophenol lb.	6.00	6.00
Dianisidine lb.	10.00	12.00
Dinitrophenol lb. ....	.30	.32
o-Dichlorobenzol lb. ....	.15	.20
Dinitrobenzol lb. ....	.26	.30
Diethylaniline lb.	1.40	1.45
*Dimethylaniline lb. ....	.90	1.00
Dinitrochlorbenzene lb. ....	.23	.28
*Nominal	—	—

COAL-TAR COLORS

ACID COLORS:		
Black lb.	1.15	1.70
Blue lb.	3.00	5.00
Brown lb.	1.25	2.00
Fuchsin lb.	2.50	3.50
Orange 11 lb. ....	.45	.50
Orange 111 lb.	1.00	1.25
Red lb.	1.10	1.20
Scarlet lb.	1.00	1.00
Violet 10B lb.	—	6.50
Aminidine Yellow R. lb.	—	1.50
Alpine Yellow lb.	2.00	7.50
Alkaline Blue, Dom. lb.	—	4.75
Alkaline Blue, Imp. lb.	—	8.00
Azo Carmine lb.	—	4.00
Azo Yellow lb.	—	2.00
Azo Yellow, green shade lb.	3.50	4.50
Brilliant Delphine B.S. lb.	—	4.50
Erythrosine lb.	12.00	14.00
Fast Light Yellow 2-G. lb.	—	3.00
Fast Red, 6B extra, cont. lb.	—	3.00
Granine lb.	8.75	9.25
Indigo 20 p.c. paste lb.	—	.75
Indigotine, conc. lb.	3.00	3.50
Indigotine, paste lb.	1.50	1.60
Metanil Yellow lb.	1.50	1.60
Medium Green lb.	5.00	6.00
Naphthol Green lb.	—	1.50
Naphthylamine Red lb.	6.75	7.50
Nigrosine, Oil Sol. lb.	—	.90
Orange, R. G. contract lb.	2.00	2.25
Orange Y conc. lb. ....	.50	.60
Patent Blue, Swiss Type lb.	12.00	16.00
Ponceau lb.	—	1.00
Scarlet 2R lb.	1.00	1.10
Tartrazine, Dom. lb.	—	1.90
Tartrazine, Imp. lb.	1.25	1.40
Uranine lb.	10.00	11.00
Wool Green S. Swiss lb.	6.00	7.00
DIRECT COLORS:		
Black lb. ....	.95	1.10
Sky Blue lb.	3.25	3.75
Blue lb.	—	1.10
Brown lb.	1.55	1.75
Bordeaux lb.	1.75	2.50
Fast Red lb.	3.50	6.00
Fast Yellow lb.	1.50	2.50
Violet lb.	2.00	4.00
Violet cont. lb.	2.20	2.50
Benzo Purpurine 10B lb.	3.50	4.50
Benzo Purpurine 4B lb.	1.80	1.90
Chrysophenine, Dom. lb.	—	2.50
Chrysophenine, Imp. lb.	—	3.80
Congo Red 4B Type lb.	1.60	2.25
Diamine Sky Blue F. F. lb.	5.00	5.25
Oxamine Violet lb.	7.00	8.00
Primuline, Dom. lb.	—	3.00

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Borax	TriSodium Phosphate
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Bichromate Soda	Zinc Oxide
Lithopone	Zinc Sulphide

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OIL COLORS:

Blacklb.	.70	- 1.00
Bluelb.	1.65	- 2.00
Orangelb.	1.40	- 1.50
Red IIIlb.	1.65	- 2.00
Red IV	.....lb.	1.80	- 3.50
Scarlet	.....lb.	1.75	- 2.00
Yellow	.....lb.	1.70	- 2.00
Nigrosine, apta. sol.	.....lb.	—	.45
Nigrosine, water sol., blue	.....lb.	—	.45
Jet	.....lb.	.90	- 1.00

SULPHUR COLORS:

Black	.....lb.	.30	- .40
Blue Dom.	.....lb.	.90	- .90
Brown	.....lb.	.35	- .45
Green	.....lb.	1.00	- 2.00
Yellow	.....lb.	.90	- 1.00

CHROME COLORS:

Alizarin Blue, bright	.....lb.	7.75	- 9.25
Alizarin, medium	.....lb.	6.25	- 7.50
Alizarin Brown, conc.	.....lb.	—	2.50
Alizarin Orange	.....lb.	—	1.50
Alizarin Red, W. & E. Paste	.....lb.	5.00	- 10.00
Alizarin Yellow G.	.....lb.	—	1.35
Alizarin Yellow R.	.....lb.	—	1.50
Chrome Black, Dom.	.....lb.	1.25	- 1.35
Chrome Black, Imp.	.....lb.	2.20	- 2.50
Chrome Blue	.....lb.	2.50	- 2.75
Chrome Green, Dom.	.....lb.	1.50	- 1.70
Chrome Red	.....lb.	—	2.00

BASIC COLORS:

Auramine, Single O. Dom.	.....lb.	—	2.25
Auramine, Double O. Imp.	.....lb.	—	3.50
Bismarck Brown Y.	.....lb.	.90	- 1.00
Bismarck Brown R.	.....lb.	1.20	- 1.30
Chrysoidine R	.....lb.	—	1.00
Chrysoidine Y	.....lb.	—	.50
Crystal Violet	.....lb.	5.00	- 5.25
Emerald Green, Crystals	.....lb.	—	8.00
Green Crystals, Brilliant	.....lb.	6.00	- 7.00
Indigo 20 p.c. paste	.....lb.	—	.75
Fuchsin Crystals, Dom.	.....lb.	4.00	- 5.00
Fuchsin Crystals, Imp.	.....lb.	12.00	- 12.50
Magenta Acid, Dom.	.....lb.	4.25	- 5.00
Magenta Crystals, Imp.	.....lb.	10.00	- 12.00
Malachite Green, Crystals	.....lb.	—	4.50
Malachite Green, Powd.	.....lb.	—	1.50
Methylene Blue, tech.	.....lb.	2.25	- 3.50
Methyl Violet	.....lb.	2.60	- 2.75
Phosphine G. Domestic	.....lb.	7.00	- 10.00
Rhodamine B. ex. con't.	.....lb.	—	27.00
Valonia, solid, 65 p.c. tan.	.....lb.	5.00	- 6.00
Victoria Blue B.	.....lb.	5.00	- 5.50
Victoria Blue, base, Dom.	.....lb.	—	6.00
Victoria Green	.....lb.	6.00	- 7.00
Victoria Red	.....lb.	7.00	- 8.00
Victoria Yellow	.....lb.	7.00	- 8.00

NATURAL DYEWOODS

Anatto, fine	.....lb.	.32	- .33
Seed	.....lb.	.08 1/2	- .08
Carmin No. 40	.....lb.	5.25	- 5.50
Cochineal	.....lb.	.65	- .80
Gambier, see tanning.	.....lb.	—	—
Indigo, Bengal	.....lb.	2.75	- 3.00
Oudes	.....lb.	2.25	- 2.75
Guatemala	.....lb.	2.00	- 2.25
Korpahs	.....lb.	2.00	- 2.25
Madras	.....lb.	.90	- 1.10
Madras, Dutch	.....lb.	.25	- .25
Nutgalls, blue Aleppo	.....lb.	.35	- .40
Chinese	.....lb.	.34	- .36
Persian Berries	.....lb.	—	—
Quercitron Bark, see tanning.	.....lb.	—	—
Turmeric, Madras	.....lb.	.10 1/2	- .11
Alleppey	.....lb.	.08 1/2	- .09

DYEWOODS

Sarwood	.....lb.	.06	- .08
Camwood, chips	.....lb.	.18	- .20
Fustic, sticks	.....ton	30.00	- 35.00
Chips	.....lb.	.06	- .06
Hypernic, chips	.....lb.	.07	- .09
*Logwood Sticks	.....ton	50.00	- 60.00
Chips	.....lb.	.03 1/2	- .05 1/2
Quercitron, see tanning.	.....lb.	—	—
Red Saunders	.....lb.	.20	- .22

EXTRACTS

Archil, Double	.....lb.	.17	- .20
Triple	.....lb.	—	.19
Concentrated	.....lb.	.20	- .25
Cutch, Mangrove, seen tanning.	.....lb.	—	—
Rangoon, boxes	.....lb.	.16	- .18
Liquid	.....lb.	.12	- .14
Tablet	.....lb.	.14	- .15
Cudbear, French	.....lb.	—	—
English	.....lb.	.25	- .26
Concentrated	.....lb.	—	—
*Nominal	.....lb.	—	—

Flavine	.....lb.	1.00	- 1.50
Fustic, Solid	.....lb.	.22	- .27
Crystals 100 p.c.	.....lb.	.30	- .40
Extract 42 deg.	.....lb.	.14	- .16 1/2
Liquid, 51 deg.	.....lb.	.15	- .19
Gall	.....lb.	.28	- .30
Hematin Extract 51 deg.	.....lb.	.16	- .18
Crystals, 100 p.c.	.....lb.	.35	- .40
Hypernic, liquid, 51 deg.	.....lb.	—	.24
Indigo, natural	.....lb.	2.00	- 2.50
Extract	.....lb.	.26	- .30
Indigotine, 100 p.c. pure	.....lb.	3.00	- 3.50
Logwood, solid	.....lb.	—	.25
Crystals, 100 p.c.	.....lb.	.28	- .30
51 deg. Twaddle	.....lb.	.16	- .18
Osage Orange, Extract 42 deg.	.....lb.	.09	- .10
Crystals, 100 p.c.	.....lb.	—	.20
Paste	.....lb.	—	.10
Persian Berries	.....lb.	—	—
Quebracho, see tanning.	.....lb.	—	—
Quercitron, 51 deg.	.....lb.	.07 1/2	- .08 1/2
Powdered, 100 p.c.	.....lb.	.14	- .18

MISCELLANEOUS DYEWOODS

Albumen, Egg	.....lb.	1.45	- 1.55
Blood, imported	.....lb.	.70	- .75
Domestic	.....lb.	.55	- .60
Prussian blue	.....lb.	.70	- .80
Soluble	.....lb.	.70	- .80
Turkey Red Oil	.....lb.	.15	- .20
Zinc Dust, prime heavy	.....lb.	.12	- .14
100-lb. tins	.....lb.	—	.12
520-lb. casks	.....lb.	—	.11
Carload lots	.....lb.	—	.10

DEXTRINES AND STARCHES

British Gum	.....per 100 lbs.	8.00	- 8.50
Dextrine, Corn, white or yellow	.....per 100 lbs.	6.75	- 7.00
Potato, white or canary	.....lb.	.17	- .18
Starch, Powd., bags & bbls.	.....lb.	—	5.35
Pearl, Globe, bags & bbls.	.....lb.	—	5.20
Potato, Domestic	.....lb.	.07 1/2	- .08
Imported, duty paid	.....lb.	.08	- .08 1/2

RAW TANNING MATERIALS

Algarobilla	.....ton	185.00	- 200.00
Divi Divi	.....ton	74.00	- 76.00
Hemlock Bark	.....ton	15.00	- 16.00
Mangrove, African, 38 p.c.	.....ton	110.00	- 125.00
Bark, S. A.	.....ton	60.00	- 65.00
Myrobalans	.....ton	50.00	- 60.00
Oak Bark	.....ton	15.00	- 16.00
Ground	.....ton	—	17.50
Quercitron Bark rough	.....ton	13.00	- 15.00
Ground	.....ton	27.00	- 30.00
Sumac, Sicily, 27 p.c. tan.	.....ton	—	120.00
Virginia, 25 p.c. tan.	.....ton	—	120.00
Valonia Cups	.....ton	—	—
Beard	.....ton	—	—
Wattle Bark	.....ton	—	90.00

TANNING EXTRACTS

Chestnut, ordinary, 25 p.c. tan, bbls.	.....lb.	.03	- .03 1/2
Clarified, 25 p.c. ton, bbls.	.....lb.	—	.03 1/2
Crystals, ordinary	.....lb.	—	—
Clarified	.....lb.	—	—
Gambier, 25 p.c. tan	.....lb.	.17	- .18
Common	.....lb.	.09	- .11
Cuba, Singapore	.....lb.	.18	- .20
Cuba, Java	.....lb.	.14	- .16
Hemlock, 25 p.c. tan	.....lb.	.05	- .05 1/2
Larch, 25 p.c. tan	.....lb.	.04 1/2	- .04 1/2
Crystals, 30 p.c. tan	.....lb.	.08 1/2	- .08 1/2
Mangrove, 35 p.c. tan	.....lb.	.09	- .10
Liquid, 25 p.c. tan	.....lb.	.08	- .10
Muskego, 23-30 p.c. tan, 50 p.c. total solids	.....lb.	.01 1/2	- .01 1/2
Myrobalans, liq. 23-25 p.c. tan	.....lb.	—	Nominal
*Solid, 50 p.c. tan	.....lb.	—	Nominal
*Nominal	.....lb.	—	—

Oak Bark, liquid, 23-25 p.c. tan	.....lb.	—	.09 1/2
Quebracho, liquid, 35 p.c.	.....lb.	—	.07 1/2
35 p.c. tan, untreated	.....lb.	—	.06 1/2
35 p.c. tan, bleaching	.....lb.	—	.08
*Solid, 65 p.c. tan, ordinary	.....lb.	—	.12
*Clarified	.....lb.	—	—
Spruce, liquid, 20 p.c. tan, 50 p.c. total solids	.....lb.	.01 1/2	- .01 1/2
Sumac, liquid, 25 p.c. tan	.....lb.	.06 1/2	- .08
Valonia, solid, 65 p.c. tan	.....lb.	—	Nominal

Oils

ANIMAL AND FISH

(Carloads)

Cod Newfoundland	.....gal.	1.12	- 1.14
Domestic, prime	.....gal.	1.10	- 1.12
Norwegian	.....bbl.	—	108.00
Liver, Newfoundland	.....bbl.	90.00	- 92.00
Degras, American	.....lb.	.07	- .07 1/2
English	.....lb.	.07 1/2	- .08 1/2
Neutral	.....lb.	.14	- .16
Horse	.....lb.	.11	- .13
Lard prime	.....gal.	—	1.85
Off prime	.....gal.	—	1.75
No. 1	.....gal.	—	1.43
Extra, No. 1	.....gal.	—	1.50
No. 2	.....gal.	—	1.38
Menhaden, Light strained	.....gal.	—	1.18
Yellow, bleached	.....gal.	—	1.20
White, bleached, winter	.....lb.	—	1.22
*Northern, crude	.....gal.	—	—
Southern, crude, f.o.b. plant	.....gal.	—	.95
Neatsfoot, 20 deg.	.....gal.	—	2.25
30 deg., cold test	.....gal.	—	2.05
40 deg., cold test	.....gal.	—	1.90
Dark	.....gal.	1.60	- 1.65
Prime	.....gal.	1.75	- 1.80
Oleo Oil	.....lb.	.35	- .38
Red (Crude Oleic Acid)	.....lb.	—	.16
Saponified	.....lb.	—	.16
Sperm bleached winter	.....gal.	1.95	- 2.00
35 deg., cold test	.....gal.	1.90	- 1.95
45 deg., cold test	.....gal.	1.90	- 1.95
Natural winter, 35 deg., cold test	.....gal.	1.95	- 2.00
Stearic, single pressed	.....lb.	—	.26
Double pressed	.....lb.	—	.27
Triple pressed	.....lb.	—	.30
Tallow, acidless	.....gal.	1.50	- 1.55
Prime	.....gal.	1.45	- 1.50
Whale, natural winter	.....gal.	1.30	- 1.35
Bleached, winter	.....gal.	1.35	- 1.40

VEGETABLE OILS

Castor, No. 1 bbls.	.....lb.	—	.20
Cases	.....lb.	—	.21
No. 3	.....lb.	18 1/2	- 19
China Wood Oil, bbls.	.....lb.	23 1/2	- 24
Coconut, Dom. Ceylon, bbls.	.....lb.	19 1/2	- 19 1/2
Tanks	.....lb.	19	- 19 1/2
Cochin, bbls, Dom.	.....lb.	.20	- .20 1/2
*Tanks	.....lb.	.19 1/2	- .20
Manila, tanks, coast	.....lb.	18 1/2	- 18 1/2
Corn, refined, bbls.	.....lb.	—	.23 1/2
Crude, Tanks	.....lb.	—	.19
Cottonseed, Crude, f. o. b.	.....lb.	—	—
mills, in tanks	.....lb.	19 1/2	- 20
Summer, yel., prim., bbl.	.....lb.	.21	- .22
*White	.....lb.	—	—
*Winter, yellow	.....lb.	23 1/2	- 25
Linseed, raw car lots	.....gal.	—	1.57
5 barrel lots	.....gal.	—	1.90
Bottled, 5-bbl. lots	.....gal.	—	1.93
Double Boiled, 5-bbl. lots	.....gal.	—	1.94
*Olive, denatured	.....gal.	2.50	- 2.55
Edible	.....gal.	3.10	- 3.20
Foots	.....lb.	19 1/2	- 19 1/2
Palm, Lagos, casks	.....lb.	.17	- .17 1/2
*Benin	.....lb.	—	.17
Niger	.....lb.	16 1/2	- 16 1/2
*Palm Kernel, domestic	.....lb.	—	—
*Imported	.....lb.	—	—
Peanut Oil, refined	.....lb.	.27	- .28
*Crude, f.o.b. mills	.....lb.	.23	- .24
Oriental, coast, tanks	.....lb.	.23	- .23 1/2
Poppy Seed	.....gal.	2.75	- 3.00
Rapeseed, ref'd, bbl.	.....gal.	1.60	- 1.65
*Blown	.....gal.	1.65	- 1.70
*Sesame, domestic, edible	.....gal.	—	2.50
*Imported	.....gal.	—	—
Soya Bean, Tanks, Pac.Coast	.....lb.	.17	- .17 1/2
New York, bbls.	.....lb.	18 1/2	- 18 1/2

GREASES, LARDS, TALLOW

(New York Markets)

Grease, whitelb.	.17 1/2	- .17 1/2
Yellowlb.	.12 1/2	- .13 1/2
Houselb.	.12 1/2	- .13
*Nominallb.	—	—

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Grease, Brown	lb.	.08	—	.10
Lard City	lb.	—	—	.23
Compound	lb.	—	—	.25
Stearine, lard	lb.	—	—	.32
Oil	lb.	—	—	.21
Tallow, edible	lb.	—	—	.17
City, prime	lb.	—	—	.14

(Chicago Markets)

Tallow, edible	lb.	—	—	.17
City Fancy	lb.	—	—	.16
Prime Packers	lb.	—	—	.16
Grease, Choice White	lb.	.16	—	.16
"A" White	lb.	.15 1/2	—	.16
"B" White	lb.	.14 1/2	—	.15
Yellow	lb.	.13	—	.13 1/2
Brown	lb.	.11 1/2	—	.12 1/2
Bone	lb.	.09 1/2	—	.10 1/2
House	lb.	.12 1/2	—	.13
Stearine, prime oleo	lb.	—	—	.20 1/2
Lard, city steam	lb.	—	—	.23

OIL CAKE AND MEAL

Cottonseed Cake, L.A. Texas	—	—	—	—
L.A. New Orleans	—	—	—	—

Cottonseed, Meal, f.o.b. Atlanta	—	—	—	—
Columbia	—	—	—	—
New Orleans	—	—	—	—
Corn Cake	short ton	55.00	—	57.00
Meal	short ton	59.00	—	64.25
Linseed cake, dom.	short ton	—	—	60.00
Linseed Meal	short ton	—	—	60.00

Miscellaneous

Accura	lb.	.18	—	.19
Bahia	lb.	.20	—	.22
Caracas	lb.	.25	—	.28
Hayti	lb.	—	—	.18
Maracaibo	lb.	.28	—	.30
Trinidad	lb.	.21 1/4	—	.23

SHELLAC

"D. C."	lb.	—	—	—
"Diamond" "I"	lb.	—	—	—
"Fine Orange"	lb.	—	—	—
Second Orange	lb.	—	—	1.70
T. N.	lb.	—	—	1.60
A. C. Garnet	lb.	—	—	—
*Nominal	—	—	—	—

*Button	lb.	—	—	—
Regular bleached	lb.	—	—	—
Bone, dry	lb.	—	—	1.75
Superfine	lb.	—	—	1.70

NAVAL STORES

(Carloads at dock)

*Spirits Turpentine in bbls. gal.	—	—	—	1.63
Wood Turpentine, steam distilled, bbls.	—	—	—	1.53
*Turpentine, Destructive distilled, bbls.	1.50	—	—	1.60
Pitch, prime	200 lb. bbl.	1.50	—	10.50
Rosins, B	—	—	—	17.00
D	—	—	—	17.30
E	—	—	—	17.50
F	—	—	—	18.35
G	—	—	—	18.40
H	—	—	—	18.50
I	—	—	—	19.00
K	—	—	—	20.00
M	—	—	—	21.00
N	—	—	—	22.00
WG	—	—	—	23.00
WW	—	—	—	24.00
Tar, kiln-burnt	bbls.	—	—	14.50

Imports of Drugs and Chemicals, Dyestuffs, Etc.

Imports from Dec. 26 to Jan. 2

ACIDS—Arsenic, 192 bbls., American Metal Co., Ltd., Tampico; Cresylic, 20 drums, W. E. Jordan, Inc., Glasgow; 42 drums, Brown Bros. & Co., Glasgow; Miscellaneous, 80 drums, J. E. Wood, Glasgow

ACAR-ACAR—25 cs., D. Nagasi & Co., Inc., Kobe; 50 bbls., W. R. Grace & Co., Kobe; 15 bbls., O. J. Weeks & Co., Osaka

ALBUMEN—4 cs., Lehn & Fink, Antwerp; 52 cs., D. Nagasi & Co., Ltd., Nagoya; 81 cs., 100 cs., Mitsui & Co., Nagoya; 204 cs., S. Suzuki & Co., Nagoya; 7 cs., Mogi & Co., Nagoya; 402 cs., Mendelssohn & Co., Nagoya; 200 cs., 50 cs., A. Klipstein & Co., Nagoya; 498 cs., 30 cs., 140 cs., National Transportation & Trading Co., Nagoya; 168 cs., Balfour, Williamson & Co., Nagoya; 27 cs., D. Nagasi & Co., Yokohama; 77 cs., D. L. Moss & Co., Yokohama; 415 cs., Baring Bros. & Co., Yokohama; 43 cs., 104 cs., 83 cs., 36 cs., 150 cs., Brown Bros. & Co., Yokohama

ALMONDS—Bitter, 331 csks., France & Canada Steamship Corporation, Valencia; 100 bgs., Bank of New York, Marseilles; 453 bgs., Brown Bros. & Co., Marseilles; Sweet, 921 cs., France & Canada Steamship Corporation, Valencia

AMMONIUM MURIATE—17 csks., Richmond Products Co., Bristol; 83 csks., Innis, Speiden & Co., Bristol; Sulphate, 33 csks., Bush, Beach, Inc., Liverpool

ANILINE COLORS—2 bbls., Lazard, Godchaux, Antwerp

ANTHRACENE—110 csks., Takuta & Co., Yokohama

ANTIMONY—394 cs., H. R. Spencer & Co., Kobe; 224 bgs., M. Goyenach & Co., Antofagasta; Crude, 1,000 cs., Wah Chang Trading Co., Nagoya

ANTIPYRINE—2 cs., C. L. Hulsinger, Havre

ARECA NUTS—276 bgs., Brown Bros. & Co., Colombo

ARGOLS—746 bgs., Brown Bros. & Co., Buenos Aires

ARSENIC—195 bbls., Niagara Electro Chemical Co., Antwerp; 20 cs., J. Mitkowski & Co., Kobe; Crude, 1,000 cs., Fumakawa & Co., Yokohama; Powder, 300 cs., S. Suzuki & Co., Osaka; White, 606 cs., Liberty National Bank, Kobe

BALSAM COPAIBA—13 cs., Neuss, Hesselstein & Co., Central American Ports; 5 cs., Ultramarines Corporation, Central American Ports; 5 cs., Mercantile Bank of America, Inc., Central American Ports; 4 cs., Gustave Amsinck & Co., Kingston

BARK—Medicinal, Miscellaneous, 50 bbls., Duncan, Fox & Co., South Pacific Ports; 279 bbls., L. J. Barber & Co., Antofagasta; Quillaya, 55 bgs., Matthews & Ventura, Ltd., Talcahuano; 132 bbls., A. Nanez & Co., Talcahuano

BEANS—Cocoa, 245 bgs., Brown Bros. & Co., Colombo; 1,500 bgs., National Park Bank, Cristobal; 275 bgs., R. A. Putman & Co., Cristobal; 4,000 bgs., Mercantile

Bank of America, Cristobal; 500 bgs., F. E. Chilick & Co., Cristobal; 500 bgs., Ultramarines Corporation, Cristobal; 150 bgs., Camancho, Rolden & Van Sickle, Cristobal; 9,685 bgs., A. Roberts & Co., Barbados; 2,000 bgs., 2,500 bgs., 2,000 bgs., 1,500 bgs., 11 bgs., Mercantile Bank of America, Inc., South Pacific Ports; 497 bgs., Ultramarines Corporation, South Pacific Ports; 1,500 bgs., E. F. Childs & Co., South Pacific Ports; 1,000 bgs., J. W. Farrel, South Pacific Ports; 8 bgs., I. Brandon & Bros., South Pacific Ports; 1,000 bgs., National Park Bank, South Pacific Ports; 500 bgs., R. A. Putman & Co., South Pacific Ports; 500 bgs., Neuss, Hesselstein & Co., South Pacific Ports; 700 bgs., Ultramarines Corporation, South Pacific Ports; 1,200 bgs., Gillespie Bros. & Co., Trinidad; 10 bgs., National Importing & Trading Co., Trinidad; 20 bgs., E. F. Darrell & Co., Trinidad; 250 bgs., 600 bgs., Royal Bank of Canada, Trinidad; 12 bgs., 200 bgs., T. Scott & Co., Trinidad; 275 bgs., A. D. Strauss & Co., Trinidad; 340 bgs., Mercantile Bank of America, Inc., Trinidad; 25 bgs., Frame, Leaycraft & Co., Inc., Grenada; 20 bgs., 132 bgs., American Trading Co., Grenada; 50 bgs., Brown Bros. & Co., Trinidad; 7,200 bgs., National City Bank, Bahia; 2,500 bgs., Bank of New York, Bahia; 56 bgs., Suzarte & Whitney, Venezuelan Ports; 370 bgs., Ultramarines Corporation, Venezuelan Ports; 500 bgs., Vglesiast & Co., Lagayra; 100 bgs., W. Schall & Co., Jeremie; 70 bgs., 19 bgs., 45 bgs., Lyon & Co., Jeremie; 71 bgs., Huttlinger & Struller, Jeremie; 38 bgs., Leon Israel & Bros., Jeremie; 59 bgs., 750 bgs., Brown Bros. & Co., Port au Prince; 100 bgs., H. Mann & Co., Cape Haytien; 600 bgs., 500 bgs., Ultramarines Corporation, La Guayra; 150 bgs., H. E. Butzw, Porto Cabello; 1,142 bgs., Mercantile Bank of America, Inc., Porto Cabello; 155 bgs., Scholtz & Co., Porto Cabello; 155 bgs., Scholtz & Co., Porto Cabello; 155 bgs., Scholtz & Co., Porto Cabello; 40 cs., Gomez & Shaw Co., Vera Cruz; 10 cs., Guaranty Trust Co., Marseilles; 36 cs., 100 bgs., Brown Bros. & Co., Marseilles; 1,000 bgs., National City Bank, Rio de Janeiro; 79 bgs., Caracas Trading Co., Paramaribo

CALCIUM HYPOPHOSPHITE—40 cs., Scott & Bowne, Southampton

CAMPOR—100 cs., D. Nagasi & Co., Inc., Kobe; 150 cs., American Camphor Refining Co., Kobe; 160 cs., C. L. Hopkins, Kobe; 100 cs., Kurawa Trading Co., Ltd., Osaka; 525 cs., Eastment & Kilbourn, Hongkong; 100 cs., Mitsui & Co., Hongkong; 50 cs., Brown Bros. & Co., Yokohama; Refined, 30 cs., Winter Ross & Co., Kobe; Refined, 150 cs., Kahara Trading Co., Ltd., Kobe; 150 cs., B. Handler & Sons, Bahia

CARBON—1 cs., B. Handler & Sons, Bahia

CASEINE—1,241 bgs., 2,534 bgs., Brown Bros. & Co., Buenos Aires; 823 bgs., French

American Banking Corporation, Buenos Aires

CHALK, PRECIPITATED—220 csks., 300 bgs., National Aniline & Chemical Co., Bristol

COPRA—21 bgs., Franklin Baker Co., Cristobal; 85 bgs., A. D. Strauss & Co., Trinidad

CUTTLEFISH BONE—32 cs., E. Baccari, Genoa; 14 cs., Irvine National Bank, Antwerp

DEXTRINE—100 bgs., H. W. Peabody & Co., Osaka; 150 bgs., S. Suzuki & Co., Osaka

DIVI DIVI—600 bgs., R. Desvervigne, Curacao; 2,313 bgs., 150 bgs., 3,460 bgs., 407 bgs., American Trading Co., Curacao; 823 bgs., 2,012 bgs., Gustave Amsinck & Co., Curacao; 4,400 bgs., Caracas Trading Co., Curacao

DRUGS—4 cs., Brown Bros. & Co., Colombo; 1 cs., Equitable Trust Co., Havre

DYESTUFFS—Alizarine, 5 cs., W. A. Foster & Co., London; Cochineal, 131 csks., W. R. Grace & Co., South American Ports; Dyes, 27 cylinders, F. Bredt & Co., Antwerp; 10 cylinders, Andreykovlev & Dulsak, Inc., Antwerp; 20 cylinders; J. B. Fortner & Co., Antwerp; 14 kegs, E. M. Thayer & Co., Antwerp

EXTRACTS—Logwood, 105 bbls., Hayti Manufacturing Corporation, Cape Haytien; Miscellaneous, 2 csks., F. Behrend, Inc., Copenhagen; 1,077 bgs., 1,872 bgs., Lee Higginson & Co., Buenos Aires; 1,930 bgs., First National Bank of Boston; 4,849 bgs., Handelsmaatschappij Transmarina; Quebracho, 3,144 bbls., New York Quebracho Extract Co., St. Thomas; 1,343 bgs., National Park Bank, Buenos Aires; 1,835 bgs., American Trading Co., Ltd., Buenos Aires; Rennet, 4 csks., Thos. Meadows & Co., Copenhagen

FLOWERS—Chamomile, 98 bbls., Brown Bros. & Co., Antwerp

GALL-NUTS—700 cs., Mallinckrodt Chemical Works, Nagoya

GUMS—Aloes, 10 cs., New England Agency Co., Aden; 30 bgs., 800 bgs., Brown Bros. & Co., Aden; 50 cs., R. Desvervigne, Curacao; 7 bgs., McKesson & Robbins, Paramaribo; Arabic, 27 bgs., London Joint City & Midland Bank, Aden; 200 bgs., National Bank of Egypt; 200 bgs., Equitable Trust Co., Aden; 500 bgs., British Bank of South Africa; 300 bgs., National Bank of Egypt; Aden; 1,250 bgs., 1,254 bgs., 468 bgs., 78 bgs., 61 bgs., Brown Bros. & Co., Aden; 17 bgs., American Express Co., Smyrna; 12 bgs., Suffern Trading Co., Smyrna; 25 bgs., Brown Bros. & Co., Smyrna; Anafetida, 2 cs., New England Agency Co., Aden; Chile, 200 bgs., A. E. Paulson, Vera Cruz; 372 bgs., Gustave Amsinck & Co., Vera Cruz; Guaiac, 1 cs., Huttlinger & Struller, Gonaves; Mastic, 15 cs., G. Anastaskia, Piraeus; 50 cs., Indian Bank, Ltd., Piraeus; 71 cs., Grecian Import & Trading Co., Piraeus; Tuna, 8 csks., I. Brandon & Bros., Panama

HERBS—Medicinal, 50 cs., France & Canada Steamship Corporation, Valencia

DRUGS
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COLORS
DYE STUFFS



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MINERALS
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Moisture	None
Chlorides	None
Chlorine	None
Sulphur	None
Benzoic Acid	None
Phthalic Acid	None
Ash	0.03%
PTHALIC ANHYDRIDE	99.97%
MELTING POINT	131.9°C.

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HOPS—44 bbls., C. Ullman & Co., Antwerp
ICHTAMMON—50 cs., C. L. Hulsing, Inc., Yokohama
INSECT POWDER—800 cs., Hofstra Manufacturing Co., Kobe
IRON OXIDE—56 casks., J. L. Smith & Co., Liverpool
ISINGLASS—20 bgs., C. Itoh & Co., Kobe
LEAVES—Coca, 98 bbls., Maywood Chemical Works, South Pacific Ports; **Matico**, 1 cs., Gravenhorst & Co., South Pacific Ports; **Rose**, 25 cs., New England Agency Co., Aden; **Senna**, 135 bgs., 87 bbls., 600 bbls., 200 bbls., Brown Bros. & Co., Aden; 154 bgs., Comptoir National d'Escompte de Paris, Alexandria
LIME NITRATE—1 casks., C. F. Garrigue & Co., Brivek
MEDICINES—Miscellaneous, 3 cs., Brown Bros. & Co., London; 40 cs., J. Personeni, Genoa; 4 cs., H. K. Mulford & Co., Buenos Aires
MENTHOL, CRYSTALS—10 cs., 40 cs., C. Morningstar & Co., Kobe; 25 cs., C. Itoh & Co., Kobe; 25 cs., D. Nagai & Co., Yokohama; 25 cs., D. Nagai & Co., Yokohama
MERCURY—10 flasks, Transoceanic Commercial Corporation, Vera Cruz; 13 flasks, Conner Bros. & Co., Vera Cruz
MYROBALANS—8,000 pockets, Brown Bros. & Co., Calcutta
NAPHTHALENE—140 casks., J. E. Jordan, Glasgow
RUX VOMICA—3,040 bgs., Brown Bros. & Co.
OILS—Camphor, 2,000 cs., A. Chirls & Co., Kobe; 5,000 cs., Dodge & Olcott Co., Kobe; 1,000 cs., Suzuki & Co., Kobe; **Cocunut**, 184 casks., Brown Bros. & Co., Aden; 6 cs., Robertson, Cole & Co., Calcutta; **Cod**, 98 bbls., J. F. Kaiser & Co., Inc., Bristol; **Codliver**, 25 bbls., E. R. Squibb & Sons, Christiania; 200 bbls., Rockhill & Victor, Christiania; 100 bbls., Thos. Nevill, Christiania; 1 cs., Hoff, Cleve Corporation, Christiania; 50 bbls., Brown Bros. & Co., Christiania; **Ground Nut**, 32 bxs., Gillespie Bros. & Co., Calcutta; **Linseed**, 200 bbls., Cook & Swan Co., Inc., Bristol; 10 bbls., Muir & Co., Glasgow; **Raw**, 223 bbls., Grosvenor & Van Rossum, Olive, 180 cs., Strohmeier & Arpe Co., Genoa; 140 cs., D. A. Shaw & Co., Genoa; 2 cs., S. G. Khoury, Smyrna; **Peanut**, 20 bbls., Mogi & Co., Kobe
OILS, ESSENTIAL—Juniper Berry, 3 cs., Smith & Schipper, Genoa; **Linaloe**, 14 cs.,

Brown Bros. & Co., Vera Cruz; **Palmarosa**, 16 cs., C. F. Smillie & Co., Kobe; **Peppermint**, 75 cs., 25 cs., C. Itoh & Co., Kobe; 160 cs., Irving Trust Co., Yokohama; **Petit Grain**, 20 cs., Equitable Trust Co., Buenos Aires
ORANGE PEEL—68 bbls., France & Canada Steamship Corporation
PERFUMERY—8 cs., C. G. Euler, Havre; 140 cs., Brown Bros. & Co., Marseilles; 2 cs., George Luenders & Co., Genoa; 1 cs., D. C. Andrews & Co., Antwerp; 1 cs., C. Exanthos, Piraeus
POTASH—14 bbls., National City Bank, Copenhagen; 10 casks., J. A. Wiarda & Co., Copenhagen; 22 casks., Bech, Van Sclen & Co., Copenhagen
POTASSIUM SALTS—135 bgs., 396 bgs., Guaranty Trust Co., Antwerp; **Carbonate**, 50 cs., Liberty National Bank, Osaka; 200 cs., S. Suzuki & Co., Osaka; 40 cs., 20 cs., Export American Co., Osaka; **Iodide**, **Granular**, 20 cs., S. Suzuki & Co., Yokohama; **Perchlorate**, 28 bbls., American Railway Signal Co., Bristol
QUININE SULPHATE—13 cs., R. W. Greff & Co., London
ROOTS—Ipsecac, 2 cs., Fidanque Bros. & Sons, Panama; **Jalap**, 4 bgs., Marasal Co., Vera Cruz; **Licorice**, 5 bbls., Mitsui & Co., Tientsin; **Medicinal, Miscellaneous**, 7 bgs., Marquardt & Co., Vera Cruz; **Sarsaparilla**, 11 bbls., Marasal Co., Vera Cruz; **Valerian**, 17 bbls., C. Lilly & Co., Antwerp; 33 bbls., Norwich Pharmacal Co., Antwerp
SACCHARIN—10 cs., R. S. Fuller & Co., Yokohama
SAFFRON—2 cs., P. E. Anderson & Co., Havre
SAFROL—10 drums, J. B. Horner, Inc., Kobe; 25 drums, George Luenders & Co., Kobe; 25 drums, Dodge & Olcott Co., Kobe
SAL AMMONIAC—Lump, 20 casks., C. D. P. Field & Co., Bristol; 50 casks., C. D. P. Field & Co., Bristol
SALYPYRINE—1 cs., Samson & Rosenblatt, Havre
SANDALWOOD—6 cs., Brown Bros. & Co., Calcutta
SEED—Canary, 228 bgs., 940 bgs., Brown Bros. & Co., Buenos Aires; **Caster**, 1,408 bgs., Bank of New York, Santos; 7,427 bgs., Brown Bros. & Co., Pernambuco; 32 bgs., Brown Bros. & Co., Jacmel; **Linseed**, 29,218 bgs., 9,006 bgs., 906 bgs., Brown Bros. & Co., Buenos Aires; 8,494 bgs., National Bank of Commerce, Buenos Aires; 10,025

bgs., Smith & Schipper, Buenos Aires; 81,684 bgs., Brown Bros. & Co., Rosario; **Mustard**, 400 bgs., 83 bgs., Brown Bros. & Co., Copenhagen; 200 bgs., London & Liverpool Bank of Commerce, Copenhagen; 497 bgs., Loewth Larsen & Co., Copenhagen
SILVER SULPHIDE—44 bgs., Kleinwort Sons, Antofagasta; 39 bgs., L. Lionel Barbar, Antofagasta; 54 bgs., Bank of Chile, Antofagasta; 50 bgs., A. Aramayo, Antofagasta; 6 cs., Baring Bros. & Co., Antofagasta; 13 cs., Anglo French Tinclampa Mineral Co., Antofagasta
SODIUM SALTS—Carbonate, 3 bbls., G. W. Sheldon & Co., Copenhagen; **Chlorate**, 539 kegs, A. Dalager & Co., Christiania; 163 kegs, Warren Products Co., Christiania; **Hydrosulphite**, 10 bbls., A. Klipstein & Co., Genoa; 10 bbls., J. K. Steifel & Co., Son, Genoa; **Prussiate**, 23 casks., Brown Bros. & Co., Marseilles
SPICES—Cassia, 100 cs., S. Suzuki & Co., Hongkong; **Pepper**, **White**, 14 bgs., Brown Bros. & Co., Colombo
SPONGES—3 bbls., Lasker & Bernstein; 6 bbls., A. Stratis, Piraeus; 8 bbls., F. M. Milia, Piraeus
STRYCHNINE, ALKALOID—1 cs., R. W. Greff & Co., London
TALC—800 bgs., L. A. Salomon & Co., Genoa
TARTAR—304 casks., France & Canada Steamship Corporation, Valencia; 113 casks., Southern Pacific Co., Marseilles; 42 casks., Bank of New York, Marseilles; 104 casks., Chas. Pfizer & Co., Marseilles
WATER—Flower, 15 cs., J. Maloof & Co., Smyrna; **Mineral**, 20 cs., L. J. Shannan, Kobe; 5 cs., J. Michas, Piraeus; 60 cs., B. Judea & Co., Rotterdam; **Rose**, 4 cs., S. G. Khoury, Smyrna; 9 cs., J. Maloof & Co., Smyrna
WAX—Bees, 112 bgs., Brown Bros. & Co., Rio de Janeiro; 3 cs., W. Schall & Co., Jeremie; 132 bgs., W. Schall & Co., Jeremie; 1 cs., Lyon & Co., Jeremie; **Carnauba**, 84 bgs., Hagemyer Trading Co., Ceara; 187 bgs., Lazard Freres Ceara; 110 bgs., Brown Bros. & Co., Ceara; 16 cs., F. S. Nicholson & Co., Inc., Para; 16 bgs., F. Ricart & Co., Inc., Curacao; **Paraffin**, 1 cs., Brown Bros. & Co., Alexandria; **Vegetable**, 100 cs., C. F. Smillie & Co., Kobe
WOOD—Bitterwood, 50 tons, J. E. Kerr & Co., Baracoa; **Cocobola**, 230 pieces, Hollinhorst & Co., Panama; **Quebracho**, 23,641 pieces, New York Quebracho Extract Co., St. Thomas

NEW DYE WORKS INCORPORATED

Many dye works are being enlarged and new ones incorporated, now that the future of the dyestuff industry in the United States seems assured by the passage of the Longworth bill. The list includes the Crystal Piece Dye Works, Inc., New York, which has increased its capital from \$5,000 to \$50,000; the Spooner Dye Works, New York, incorporated by J. and J. Cuchiara and A. Granatelli, capital \$10,000; the Magic Products Corporation, New York, incorporated by J. C. Berrien, H. Friedman and J. Kahn, capital \$10,000; the Narlington Extract Dye & Chemical Co., incorporated under the laws of West Virginia by C. A. Weagher, G. W. Hunley, Jr., and J. A. Dennison, with a capital of \$200,000; the Erie Dyeing Company, Cleveland, Ohio, recently incorporated under the new name of the Erie Dyeing & Processing Company, with a capital of \$10,000; the Superior Dye Works, Brooklyn, N. Y., which will erect a \$10,000 plant; the Universal Aniline Dye & Chemical Co., Milwaukee, Wis., which plans the construction of a plant in the South Milwaukee district; the Utica Dyeing Co., Utica, N. Y., which will erect an addition to its plant; and the Amalgamated Dyestuff Chemical Works, Newark, N. J., which plans an \$8,000 extension to its plant.

Frederick B. Meeker has retired from Brown Brothers & Co., after association with that firm for more than fifty years. For the last twenty years he was head of the firm's commercial credit department.

FEWEST FAILURES SINCE 1881

With fewer commercial failures than in any year back to 1881, when the total number of firms in business was less than half of what it is at present, the 1919 insolvency statement contributes largely to an annual statistical exhibit that has no precedent. Preliminary returns to R. G. Dun & Co. disclose only 6,445 defaults for the year just ended, exclusive of banking suspensions and personal bankruptcies, and \$112,790,037 of liabilities, as against 9,982 reverses for \$163,019,979 in 1918, when the showing was considered remarkably favorable. Without exception, failures in each quarter of 1919, both in number and indebtedness, fell materially below those of 1918, although in the last quarter of the past year a tendency toward increase was witnessed.

Tin scored an advance in London of £6 5s on sales of 350 tons futures and 70 tons spot. The market was reported strong at the advance. Straits tin was also higher by £6 5s for spot and £5 for shipment from the Far East. The quotations as cabled the Metal Exchange were: Standard, spot, £347 10s; futures, £349 10s; Straits, spot, £348; Eastern shipment, £338 10s. The local market responded by an advance of a full cent per pound, which brought the market to 60½¢ by early afternoon. This price was actually bid for the metal against an asking price of 61¢. For shipment from England importers asked 61c and for shipment from the Far East 61¼c.

New Incorporations

Egyptian Chemical Co., Boston, Mass., capital \$90,000. George E. Bangs, Arthur A. Rollins, George E. Babson, M. G. Hoggett, B. A. Beecher.

Kadeem Drug Co., Inc., Brooklyn, capital \$24,000. J. Dunieff, H. Messinger, David N. Katz, Brooklyn.

Shawinigan Products Corporation, Manhattan, capital \$200,000. Carbide, acetic acid and chemicals. R. E. Dwight, T. A. O'Callaghan, J. B. Breckenridge, 96 Broadway, New York.

California Chemical Co. Dover, Del., capital \$1,000,000. B. B. Colfax, J. M. Bengal, H. L. McMan, all of Los Angeles, Cal.

Dura Chemical Co., Philadelphia, Pa., capital \$100,000. To manufacture dyestuffs and chemicals. J. V. Pimm, E. M. MacFarland, F. R. Hansell.

Ver-Vac Co., Baltimore, Md., capital \$50,000. Flavoring extracts. Harry R. Nicholson, Carl Murbach, W. Howard Hamilton, Baltimore.

Schur-Lustre Co., Washington, D. C., capital \$5,000. Frank L. Peckham, Frank Van Sant, Carlyle S. Baer, Washington.

Milano Chemical Co., Tulsa, Okla., capital \$30,000. J. M. Robins, Homer A. Orcutt, Tulsa; Chester E. Lobaugh, Oklahoma City.

Exidol Laboratories, Inc., Dover, Del., capital \$100,000. Robert K. Thistle, George V. Reilly, A. Roy Meyers, all of New York.

Bryant and Cooper, Inc., Brookline, Mass., capital \$25,000. Frederick W. Bryant, of Allston, Mass.; Katherine E. Flynn, Brighton, Mass.; W. Lloyd Allen, Newtonville, Mass.

Madame M. Yale, Inc., Manhattan, capital \$150,000. To manufacture chemicals, toilet preparations and druggists sundries. J. J. Leahy, Jr., E. B. Myers, R. McCord, 59 Wall St., New York.

P. and Z. Corporation, Brooklyn, capital \$10,000. To deal in chemicals. Charles Rubin, Blanch Rubin, Toby Zimmerman, Brooklyn.

Gilbert Fertilizer Co., Gilbert, South Carolina, capital \$20,000. P. A. Smith, J. Collins Price, of Gilbert.

Greenville Fertilizer Co., Greenville, South Carolina, capital \$10,000. W. G. Hudgens, C. G. Hunter, of Greenville.

Pepsinic-Seltzer Co., Worcester, Mass., capital \$50,000. Frank A. Sanderson, Joseph W. Lavigne, Arthur B. Brunell, Albert A. Brunell, Worcester.

John Post Corporation, Manhattan, capital \$20,000. Druggists' supplies. S. Post, G. Storer, W. Weller, 107 West 97th St., New York.

Church and Scott, Inc., Cooperstown, N. Y., 200 shares common stock, no par value; active capital \$12,000. C. A. and S. P. Scott, E. M. Clapsaddle, Cooperstown.

The Roxton Perfume Co., Bronx, capital \$5,000. S. Sottosanti, C. Salerno, G. Blondillo, 2424 Hughes ave., Bronx.

The Supreme Cleaners and Dyers, Inc., Mt. Vernon, N. Y., capital \$80,000. I. and N. Nelson, S. Hoffman, 901 Fox st., Bronx.

The Yardley Chemical Corporation, Manhattan, capital \$450,000. J. Piper, R. Rey, J. E. Gilbert, 57 West 75th st., New York.

Chinese Fur Dyeing Co., Brooklyn, capital \$30,000. S. Zechow, J. Wetzler, A. Kaplan, 387 Decatur st., Brooklyn.

The Murphy Wholesale Drug Co., Dover, Del., capital \$25,000. P. J. Murphy, W. M. McAndrews, M. F. Donahoe, all of Scranton, Pa.

Western Fertilizer Co., Dover, Del., capital \$10,000. T. L. Croteau, H. T. Knox, S. E. Dill, representing a Wilmington trust company.

Merger—Miller-Strong Drug Co., Buffalo, with Druggists Merchandising Corporation.

Reorganization—Imex Corporation, 23 Beaver st., New York, 500 shares preferred stock, \$100 each; 1,000 shares common stock, no par value; active capital \$55,000.

Capital Increases—Worden Drug Co., Watertown, N. Y., from \$12,000 to \$30,000.

E. T. Browne Drug Co., Manhattan, from \$50,000 to \$100,000.

Fishburn's Dyeing and Dry Cleaning Co., Dallas, Tex., from \$75,000 to \$150,000.

Worden Drug Co., Watertown, N. Y., from \$12,000 to \$30,000.

Authorizations—V. Vivaudou, Inc., Delaware, agents for toilet articles; 300,000 shares common stock, no par value, active capital 30 shares. Representative A. Levine, 69 New st., New York.

British Incorporations

Wm. Browning Co., Ltd., has been incorporated in England, with capital of £70,000 to take over the business carried on at Albert Works, Camden Town, N. W., as Wm. Browning & Co., Ltd., and to carry on the business of chemists, druggists and oil merchants.

Four Ashes Manufacturing Co., Ltd., has been incorporated in England with capital of £100,000, to carry on the business of manufacturing chemists and manufacturers and distillers of tar and all products and derivatives therefrom, manufacturers of oils, soaps, greases, paints, varnishes, and disinfectants. Representative, W. O. Vizard, 10a Featherstone Buildings, London, W. C. 1.

Steadmans (Weymouth), Ltd., has been incorporated in England, with capital of £2,000 to take over the business of chemist, carried on by F. H. Cox, at St. Thomas street, Weymouth, and Melcombe Regis, Dorset. The first directors are: F. G. Howard, M.P.S., 1 Lyndhurst Terrace, Weymouth, chemist; and C. H. Bulloch, Summerland, Weymouth, Representative: 87 St. Thomas st., Weymouth.

Alfred Bishop (Subsidiaries), Ltd., has been incorporated in England with capital of £500 to carry on the business of manufacturing, wholesale, and retail chemists, druggists, drysalers, oil and color men, importers, exporters and manufacturers of and dealers in pharmaceutical, medicinal, chemical, industrial, toilet, and dental preparations.

The Pittsburgh Chemical Products Co. has made application to the Governor of Pennsylvania for a charter. The incorporators named in the petition are Benjamin H. Arnheim, Anna W. Arnheim, James J. Brown, Emanuel Victor Arnheim and S. H. Liggett. A. H. Kaufman is solicitor for the company, which proposes to manufacture, buy and sell all kinds of chemical substances, preparations, compounds and compound specialties.

The West Texas Wholesale Drug Co. has been organized by John T. Reeves, of Oklahoma City, C. C. Pollard, a druggist of Midland, Tex., and Will P. Grace, of Dallas, Tex. The company will locate at Sweetwater, Tex.

Want Ads

EMPLOYEES FURNISHED. Stores sold—also furnished; All States. Positions. Doctors, Dentists, Veterinarians furnished. F. V. KNIEST, Omaha, Neb., Estab. 1904.

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Arsenic
George F. Taylor Commission Co.
Established 1873
2 Rector Street New York

Jordan Coal Tar Products, Inc.

13 Cliff Street, New York

Specialists in

Benzols	Toluols	Xylois
Solvent Naphthas	Heavy Naphthas	
Creosote Oils (All Grades)	Dead Oils	
Anthracenes	Tars	Pitches
Naphthalene (Crude—Flake)		
Phenol-Cresylic Acid	Phenol-Cresols	

Sales Agents;
Manufacturers Importers Exporters

Industrial Chemicals

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